West Coast Vancouver Island Sport Fishery Creel Survey Statistics 2001 and Historical Data 1984-2000

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by

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ABSTRACT

Lewis, D.M. 2004. West Coast Vancouver Island sport fishery creel survey statistics 2001 and historical data 1984-2000. Can. Manuscr. Rep. Fish. Aquat. Sci. 2639: 66 p.

This report documents the 2001 catch and effort estimates for the West Coast Vancouver Island sport fishery creel survey. Catch and effort statistics for the West Coast Vancouver Island tidal sport fishery are presented for each month, Statistical Area and by individual species. Creel survey data collection began in Barkley Sound in 1984 and historical data from fishery officer reports is also presented from 1979-1983. The creel survey expanded over the years to include the entire west coast of Vancouver Island in 2001.

This year's statistics were derived from 5,802 fishing interviews and 145 effort surveys (aerial and onwater counts). Anglers conducted an estimated 76,240 boat trips and kept 52,354 chinook, 38,865 coho, 30 chum, 5,676 pink, 69,912 sockeye, 18,415 halibut, 7,834 lingcod, and 31,968 rockfish. The catch and effort for 2001 increased from the 2000 estimates due to increased fishing opportunities. Effort has increased 15% to 73,462 from 62,710 boat trips in 2000. Chinook catch has increased 20% to 51,146 from 40,942 in 2000. Total salmon catch success has increased from 1.31 in 2000 to 2.19 in 2001. The 2001 WCVI catch consisted of 58,217 groundfish, which made up 26% of the overall catch. The catch success for rockfish declined during the creel survey period from 0.72 fish per boat trip to 0.28 fish per boat trip, while the average catch success for halibut was 0.24 and lingcod was 0.10 fish per boat trip.

Chinook and coho were inspected for adipose fin clips and the presence of a coded wire tag using an electronic sampling device. From fish landed during the creel survey, 2,462 chinook and 2,344 coho were inspected. In 2001, 120 WCVI thermally marked otoliths were found in 718 chinook sampled in WCVI and Northern sport fisheries.

RÉSUMÉ

Lewis, D.M. 2004. West Coast Vancouver Island sport fishery creel survey statistics 2001 and historical data 1984-2000. Can. Manuscr. Rep. Fish. Aquat. Sci. 2639: 66 p.

Ce rapport présente les estimations des captures et de l'effort de 2001 d'après l'enquête sur la pêche sportive sur la côte ouest de l'île de Vancouver (COIV). Nous présentons les statistiques sur les captures et l'effort de la pêche sportive dans les eaux à marée de la COIV par mois, par zone statistique et par espèce. La collecte de données par enquête sur la pêche sportive a commencé dans la baie Barkley en 1984, et nous présentons aussi des données pour 1979-1983 provenant des rapports des agents des pêches. Au fil des ans, l'enquête a pris de l'expansion pour couvrir toute la COIV en 2001.

Les statistiques de 2001 ont été compilées à partir de 5 802 entrevues de pêcheurs et 145 relevés de l'effort de pêche (dénombrements à partir d'aéronefs ou de bateaux). On estime que les pêcheurs ont effectué 76 240 sorties en bateau et ont gardé 52 354 saumons quinnats, 38 865 saumons cohos, 30 saumons kétas, 5 676 saumons roses, 69 912 saumons rouges, 18 415 flétans, 7 834 morues-lingues et 31 968 sébastes. En raison des possibilités de pêche accrues, les captures et l'effort en 2001 étaient en hausse par rapport à 2000. L'effort est passé de 62 710 sorties en bateau en 2000 à 73 462 sorties en 2001 (hausse de 15 %). Les prises de saumons quinnats ont augmenté de 20 %, soit de 40 942 en 2000 à 51 146 en 2001. Le succès de capture pour toutes les espèces de saumons est passé de 1,31 en 2000 à 2,19 en 2001. En 2001, 58 217 poissons de fond ont été capturés, soit 26 % des prises totales. Le succès de capture du sébaste a diminué durant la période de l'enquête, passant de 0,72 à 0,28 poisson par sortie de bateau, tandis le succès de capture moyen était de 0,24 poisson par sortie de bateau pour le flétan et de 0,10 poisson par sortie de bateau pour la morue-lingue.

On a inspecté 2 462 saumons quinnats et 2 344 saumons cohos pour voir s'ils avaient la nageoire adipeuse rognée ou s'ils portaient une micromarque codée (inspection faite à l'aide d'un appareil d'échantillonnage électronique). En 2001, sur 718 saumons quinnats échantillonnés dans les pêches sportives de la côte ouest et du nord de l'île de Vancouver, 120 avaient des otolithes thermomarqués sur la COIV.

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1.0 INTRODUCTION

1.1 DESCRIPTION OF THE WCVI SPORT FISHERY

1.1.1 Fishery Area

Prior to 1984, sport catch estimates for the West Coast of Vancouver Island (WCVI) were limited to observations and estimates by Fishery Officers (Appendix C1 & C2). Structured creel surveys have been conducted in Alberni Inlet and Barkley Sound since 1984 covering Statistical Area 23. Since 1991, the WCVI sport fishery has expanded to operate off the west coast of Vancouver Island from Carmannah Point, near Juan de Fuca Strait, to Quatsino Sound on the northwest of Vancouver Island.

This large area is subdivided into 54 creel survey subareas, which vary from the Statistical Areas to more accurately represent sport fishing areas. These include Areas 21, 23-27 and 121-127 (Fig. 1).

The recreational fishery in Area 20-1 centers around the community of Port Renfrew. The area east of Sheringham Point (Area 20-5) is covered by the Georgia Strait creel survey. Several boat ramps and a marina are located in Port San Juan and access is limited by the tides.

The Area 21 fishing area is located immediately outside of Nitinat Lake. Fishing effort in Area 21 originates from boat ramps inside Nitinat Lake, from Port Renfrew and Bamfield.

Area 23 is comprised of two main geographic features, Alberni Inlet and Barkley Sound. Alberni Inlet (Area 23A) is a fjord extending for about 50 km from the mouth of the Somass River with an average width of approximately 1.5 km and depths ranging to almost 400 m. Access to Alberni Inlet is primarily from ramps and marinas at or adjacent to the community of Port Alberni, located at the head of Alberni Inlet.

The southern end of Alberni Inlet opens into Barkley Sound (Area 23B) with numerous groups of islands of various sizes separated by large channels. Access to Barkley Sound is provided from marinas and ramps at Bamfield and Ucluelet as well as from private cabins and commercial fishing lodge operations located along the shoreline and islands of Barkley Sound that are accessible by boat or chartered aircraft.

The Area 24 fishery occurs from Florencia Bay to Hot Springs Cove with the majority of the effort concentrated around Tofino, between Portland Point and Vargas Island. The main launching points are located in Tofino.

The fishing effort in Area 25 in concentrated in Nootka Sound and Tlupana Inlet and to a lesser extent Esperanza Inlet. It is accessed by boat ramps and marinas located in Gold River, Tahsis, Zeballos and Cougar Creek.

Sport fishing in Kyuquot Sound (Area 26) is concentrated in the outer portions of the sound (subarea 26-1) around Spring Island and the offshore area, Kyuquot Reef. The effort in Area 26

is limited in some years due to poor road access and lack of a public gas dock. Currently the bulk of the sport fishing fleet is made up of local lodges and residents.

The creel survey in Area 27 was initiated in 2001. The landing sites designated for the survey were Coal Harbour, Winter Harbour, Port Alice and Holberg. The bulk of the effort was concentrated inside of Cliffe Point in June and moved outside of Cliffe Point in July and August.

Catch and effort data has been collected separately for inshore and offshore areas since 1999 for Pacific Salmon Treaty (PST) catch accounting. Inshore (terminal) areas are defined as those waters inside the surfline and offshore areas are those seaward of that line. Some major offshore fishing areas include Amphitrite Bank, Seven and Twelve Mile Banks, Big Bank, Finger Bank, Portland Point, Bajo Reef and Kyuquot Reef.

The part of the West Coast Vancouver Island chinook sport fishery included in the WCVI Aggregate Abundance Based Management (AABM) chinook fishery includes:

- Areas 21, 23, 24 inside the Canadian "surfline" and Areas 121, 123, 124 during the period October 16 through July 31, plus that portion of Areas 21, 121, 123, 124 outside of a line generally one nautical mile seaward from the shoreline or existing Department of Fisheries and Oceans surfline, during the period August 1 through October 15 (PSC 1999).
- Area 25, 26, 27 inside the Canadian "surfline" and Areas 125, 126, 127 during the period October 16 through June 30, plus that portion of Area 125, 126, 127 outside of a line generally one nautical mile seaward from the shoreline or existing Department of Fisheries and Oceans surfline, for the period July 1 through October 15.

1.1.2 Fishery Period

The West Coast of Vancouver Island is a fertile feeding and rearing area for many salmon stocks. For the main target species, chinook, October through January is predominated by non local feeders which are rearing off the WCVI. In the February through early June period other spring run stocks are migrating through the WCVI fishing area. In the mid June through September period the non local feeders are maturing while local WCVI origins are migrating through the area. The WCVI sport fishing effort is generally focused on these non local feeders migrating through the offshore areas until the local WCVI origin return to terminal areas in July and August.

Sport fishing activity on West Coast Vancouver Island occurs throughout the year but the vast majority of the activity takes place from the beginning of June until the end of September (unpublished Luedke et. al., 1994). The main target species are chinook and coho except for Alberni Inlet in June and July when the target species is the terminal run of Somass sockeye.

The fishery has changed in 2000 and 2001 due to chinook non-retention regulations in terminal areas. The fleet has increased its effort in July, before the inshore closures and moved mainly to offshore areas after the inshore closures. Restrictions in the WCVI sport fishery centre primarily on area and timing closures to protect returning stocks to the WCVI area or those migrating through the area during certain periods.

1.2 OBJECTIVES

The specific objectives of the 2001 WCVI creel survey were:

1. To estimate the sport angler effort and catches of chinook by anglers with coefficients of variation less than 10% by month for Statistical Areas 20-1 through 27; and to estimate the number of chinook released. This requires observations of at least 10% of the sport effort.

2. To estimate effort, catch and releases for all other species by month and Statistical Area including coho, chum, pink, sockeye, halibut, lingcod, rockfish and other finfish.

3. Intensive sampling in Alberni Inlet for Robertson Creek Hatchery chinook.

4. To estimate the catch rate for adipose clipped chinook and coho, and determine the presence of coded wire tags in mass marked chinook and coho in the sport fishery.

5. To collect biological samples from Somass River sockeye, chinook, coho, halibut and lingcod.

2.0 METHODS

2.1 STUDY DESIGN

The design of the WCVI Creel Survey conducted in 2001 was similar to that used by DPA Consulting Ltd. (1982) with some modifications to the data analysed, sampling intensity, flight routes and data processing. It is comprised of two independent surveys: angler interviews and aerial overflights. Angler interviews provide data on sport fishing catch per unit effort (CPE) and daily activity patterns. Aerial overflights provide estimates of the total sport fishing effort in the study area at the time of the aerial survey. These data are combined to provide monthly estimates of total sport fishing effort and total catch of salmon and groundfish in the sport fishery. In its simplest form, the estimated total catch is calculated by multiplying the estimated total effort by catch per unit effort.

The fishery was stratified according to the following criteria:

1. Month. The survey operated from June through to and including September.

2. Geographic area. Survey effort was allocated by Statistical Areas 20-1 through 26 and 27 (2001). Offshore areas were separated from inshore areas in the same statistical area.

3. Day type. Weekend and mid-week days were considered independently because sport fishing activity is known to differ for the two types of days.

4. Time of day. Sampling shifts (one shift is a set number of consecutive hours of interviewing anglers at one site by one creel surveyor) were conducted during set time

periods. From June to September sampling was conducted during either an early shift (approximately 0700 to 1500 hours) or a late day shift (approximately 1500 to 2300 hours).

5. Guided verses unguided anglers. Certain sites are known to have primarily guided fishing effort. Unpublished data from previous surveys in this series confirm that the CPE from guided boats differs markedly from unguided boats. No effort was made to document guided vs. unguided, future creel surveys will try to isolate the two different parties.

In each region, various landing sites were chosen as locations for surveyors to conduct interviews. Site selection was based on 4 criteria: representativeness, traffic volume, site accessibility and adequate observation points. Discussions with local fishers, marina operators and Fisheries Officers and data from previous surveys were used to choose sites that were representative of the local sport fishing activity (i.e. sites which were used by a wide cross-section of anglers). Sites with expected traffic volumes of more than 15 boats per day in the summer were considered as possible sampling locations. Expected traffic volumes for sites were compiled from previous surveys or from discussions with marina operators or local Fisheries Officers. It is not feasible to obtain data from every boat in the fishing area; however a representative sample can be obtained by the optimal allocation of stints at each landing site. This is possible with the estimate of variance from previous creel surveys.

Site accessibility refers to whether an interviewer can easily reach a site by car or ferry during the defined shift hours. Only sites with good accessibility were selected. The final criterion, adequate observation points, was essential for interviewers to obtain an accurate count of all boats returning to a landing site. At some large marinas, where the number of access points made it impossible to see all boats returning, the facility was defined and sampled as two separate sites.

Allocation of sampling effort among months followed the same general pattern as fishing effort, that is, more effort was allocated during the summer when fishing effort is at its highest. Allocation of sampling effort among regions (groups of Statistical Areas) also followed fishing effort patterns. Within each month, each chosen site was allocated shifts. These shifts were divided equally among weekend and mid-week days and as well as being allocated to morning and evening daily time periods.

The Department of Fisheries and Oceans conducted data collection, entry and preliminary processing as well as conducting the estimation of the catch and effort statistics in 2001. Details of the survey design by year, including allocation of sampling effort and analyses, can be found in unpublished reports by DPA Consulting (1984-1987) and summary reports by J.O.Thomas and Associates (1988-1999).

2.2 DATA COLLECTION

2.2.1 Angler Interviews

Surveyors were stationed at boat ramps for scheduled shifts to interview anglers as they returned from fishing. The number of boats returning to a site during a shift as well as the number of interviews attempted and completed were recorded on a tally sheet. For each boating party landing, the following information was recorded on an interview form (Fig. 1):

1. Total number of anglers in the boat.
2. Time of landing.
3. Whether the party had been sport fishing and whether they were guided.
4. Residency of anglers.
5. Time of departure and length of trip.
6. Time during which fishing lines were in the water.
7. Average number of lines in the water.
8. Catch Summary: -Total number and species of kept and released fish for each of the Statistical Subareas.
   -Number of hours spent fishing in each Statistical Subarea.
9. Number of marked and unmarked chinook and coho in the catch.
10. Number of hours directed at each species.
11. Loss of salmon to seals.
12. Shellfish Catch Summary

Interviewers trained in fish identification inspected each boating party's catch when possible. Landed chinook and coho were checked for a missing adipose fin, and sampled electronically for the presence of a coded wire tag embedded in the fish nose cartilage. In addition, scale samples for age determination and measurements of nose-fork length were taken during every sampling shift.

In 2001, interviews were conducted each month at a maximum of 19 of the 21 designated landing sites (boat ramps, marinas, or resorts, Appendix B-2) representative of the sport fishing activity in the survey area. Targets of desired precision and number of surveyors available dictated the number of sites selected in each area. For each area - day type - work block stratum, sampling shifts at a site were chosen on a near random basis from the total number of shifts available. For definition of the above terms (day type, work block, shift) see Appendix C.

2.2.2 Effort Counts

Aerial surveys, conducted from airplanes travelling along pre-defined routes, allowed observers to count vessels actively sport fishing throughout WCVI. Planes flew at an altitude of 150-210 m (500-700 feet) to facilitate a broad range of vision and still allow easy identification of vessel characteristics. Each plane carried at least one observer; the observer counted sport

fishing boats in the flight path. Observations were periodically audited using a second observer. Figure 2 shows the flight paths used.

The flight path and time of departure were designed to cover major concentrations of sport fishing activity. To maximise precision, flying times during which fishing effort was rapidly changing were avoided. The number of overflights each month was governed by budget constraints targets of desired precision, and by the expected number of interviews from a given number of sampling shifts (English et al. 1986). The days for overflights during a month were randomly selected for each day type.

Alberni Inlet was surveyed using on water effort counts. The counts started at the head of Alberni Inlet. The time in and out of subareas 23A and 23B were recorded as well as the number of sport vessels actively fishing. This was repeated from the mouth of the Alberni Inlet and back to the head. On water effort counts were also used at times and in areas where adequate numbers of aerial surveys were not available due to weather.

2.3 DATA ANALYSIS

Data analysis included calculation of catch and effort statistics, calculation of variance of total fishing effort and total catch and estimation of marked chinook and coho salmon. Appendix C of the Strait of Georgia creel report (1999) details the methods and equations used in the above data analysis.

For most survey years, the interviews, landing tallies, and boat counts were entered into data files using the data entry system created by DPA Consulting Ltd. (1985). Catch and effort estimates were produced by a combination of Fortran programs. These programs were translated into Access for the 2000 and 2001 creel surveys. In addition, inseason estimates were produced in an excel spreadsheet. These estimates were used to provide catch estimates for inseason management and to check final estimates for any obvious errors.

In addition to catch estimates generated from creel survey data and aerial overflights, sport lodge catch and effort was also collected. The West Coast of Vancouver Island has a number of remote lodges where catch cannot be captured by the landing site creel survey method. Logbooks are distributed to lodges who voluntarily record their daily catch data by boat or group of boats. Logbooks were distributed in Statistical Areas 20 to 26 (Port Renfrew to Kyuquot). Nine lodges returned completed logbooks out of the 16 possible lodges (56% of the lodges). The data received represented 82% of the total lodge effort (boat trips) and 78% of the lodge chinook catch. The guided boats not covered by logbook information are counted by the effort overflight and included in the creel estimate. In order to add the lodge data to the creel estimate, the daily lodge effort must be subtracted from the aerial overflight data since the overflight observer cannot distinguish guided boats from the rest of the fleet. Once the lodge effort has been removed from the creel effort, lodge catch and effort can be added directly to the creel estimates.

3.0 RESULTS

3.1 DISTRIBUTION OF SAMPLING EFFORT

Table 1 shows the number of creel survey interviews conducted with anglers who had been actively fishing by month and Statistical Area in 2001, and the number of monthly effort counts. A total of 5802 interviews, and 145 effort counts were conducted in 2001. Figure 3 shows that the monthly distribution of interviews generally reflected the monthly distribution of fishing effort (number of boat trips, Table 3). The total interviews represent 8.8% of the estimated total fishing effort for the entire study area (65,927 boat trips, Table 3). The interviews ranged in each Statistical Area from a low of 3.0% of the effort in Area 25 to a high of 14.5% of the effort in Area 20-1 (Tables 1 and 4).

3.2 SPORT FISHING EFFORT AND CATCH

The 2001 WCVI sport fishing catch and effort statistics are summarised for each species by month in Table 3 and by Statistical Area in Table 4. Appendices B-1 to B-11 show the fishing effort and catches statistics by species for each combination of month and Statistical Area.

Anglers made 76,240 boat trips during 2001, which is an 18% increase from the 2000 effort of 62,710 trips (Fig. 4, Table 2). Historical years must be compared by area due to the expansion of the WCVI creel survey. The fishing effort followed the same seasonal pattern as seen in previous years with the exception of August when chinook retention was limited to offshore areas (Table 3, Fig. 5). Effort levels climbed steadily from June, peaked in July and declined in September.

The total finfish sport catch in the WCVI was estimated at 225,055 pieces (Table 3) and consisted of 74% salmon and 26% groundfish. Anglers released an additional 19,578 legal sized chinook and 37,564 legal sized coho (Appendix B7 & B8).

There were regulation changes in 2001, which altered the catch and effort of the sport fishery. These included an earlier opening for hatchery marked coho in offshore areas (August 1) than in 2000 (August 24). The chinook conservation corridor in Area 25 included spot closures in terminal areas. There were also unexpected inseason closures for sockeye salmon in Area 23.

General regulations were minimum size limit for chinook of 45 cm, with a daily limit of 2, possession of 4, and an annual limit of 30 for the WCVI. See appendix E for a historical synopsis of regulation changes.

3.2.1 Salmon

Salmon sport catches for the WCVI in 2001 totalled 166,837 pieces (Tables 3 and 4) and consisted of 31% chinook, 23% coho, 4% pink, 42% sockeye salmon.

In 2001, anglers kept 52,354 chinook (Tables 3 and 4), compared to 40,942 in 2000 (Fig. 4, Appendix E-1). The 2001 monthly chinook catches peaked in July and then declined steadily (Fig. 6, Table 3). Seasonal catch efficiency for chinook averaged 0.69 fish per boat trip overall and peaked in June at 0.91 fish per boat trip (Fig. 7, Table 5). In previous years the chinook catches peaked in August when local origin fish returned to terminal areas. These terminal areas were closed to chinook retention in 2000 and 2001 (Appendix E).

The spatial distribution of chinook catch although reduced, followed a similar pattern to previous years. The highest catches were taken in Area 23 (58% of total) (Table 4, Fig. 8). The chinook catch per unit effort was 0.99 for Area 20-1, 1.13 for Area 23, 1.01 for Area 24, 0.54 for Area 25, 1.46 for Area 26, and 0.08 for Area 27.

The 2001 coho catch was 38,865 pieces (Tables 3 and 4). Monthly coho catches peaked in September (Fig. 8 and 9). Coho fisheries were limited to selective mark fisheries in most areas except for terminal areas of Area 23 and 24. Of the coho catch, 54% occurred in Area 23.

In 2001, WCVI anglers caught 30 chum (Fig. 10), highest catches from Area 23B (60%), and 5,676 pink (Fig. 11) of which 46% came from Area 23B and 31% came from Area 20-1. Sockeye catches totalled 69,912 (Fig. 12), highest catches from Area 23A (97%), (Table 4).

The average number of salmon caught during each boat trip in 2001 was 2.19, down from a high of 2.29 in 1996 (Table 5). As seen below, the 2001 value was significantly higher than the range of averages seen in recent years.

Year	Catch Success
1994	1.09
1995	1.08
1996	2.29
1997	1.73
1998	1.39
1999	1.06
2000	1.31
2001	2.19

In 2001, 23B showed the highest effort expended with a total catch per effort of 2.07 (Table 4). Area 23A recorded the greatest number of fish caught per unit effort (5.29). Area 23B recorded the greatest number of salmon hooked and released (Table 4).

The WCVI recreational fishery chinook catch must be accounted in the overall WCVI allowable catch as determined through an Aggregate Abundance Based Management system described in the Pacific Salmon Treaty. The catch is split into inside (terminal) and outside (AABM) catch. In 2001, the inside chinook catch was 6,423 and the outside chinook catch was 52,354. Catch

estimates for other species for these areas, as well as release estimates for chinook and coho can be found in Table 8. Historical inside and outside chinook catch can be found in Appendix G.

3.2.2 Groundfish

The 2001 WCVI catch consisted of 58,217 groundfish, which made up 26% of the overall catch (Tables 3 and 4). Lingcod and rockfish creel estimates have been recorded since 1984, and halibut creel estimates have been recorded since 1993 (Table 2). The species composition of the groundfish catch for 2001, based on the Table 4 data, was as follows:

Groundfish Species	Catch	% of Total Groundfish Catch	Major Catch Area
Halibut	18,415	32%	23B
Lingcod	7,834	13%	23B / 25
Rockfish	31,968	55%	23B
Total	58,217	100%	

The majority of the groundfish catch was taken in July when the effort was at its peak (Table 3, Fig. 4). In 2001, rockfish catches peaked dramatically in July compared to previous years when catches were similar over July and August (Figure 14). The same pattern can be seen for WCVI lingcod (Figure 15). Halibut catches in 2001 peaked in July as in previous years and dropped sharply in August (Figure 16).

The catch success for rockfish (Table 3) declined during the creel survey period from 0.72 fish per boat trip in June to 0.28 fish per boat trip in September, while the annual average catch success for halibut was 0.24 and lingcod was 0.10 fish per boat trip (Table 5).

Catch by Statistical Area for rockfish was highest in Area 23B (48% of total, Table 4). Lingcod were caught in greatest numbers in Area 23B and 25 (39% and 41% of total, Table 4), the largest halibut catch came from Area 23B (57% of total, Table 4).

Rockfish were identified by individual species on the interview form. For individual species commonly grouped as rockfish see appendix F. Of the rockfish identified by species in 2001, 40% were shown to be Black Rockfish (Sebastes melanops), 15% Yelloweye (Sebastes ruberrimus), 14% Canary (Sebastes pinniger), 14% Quillback (Sebastes maliger), 7% Copper (Sebastes caurinus), 6% China (Sebastes nebulosus), and 4% other (Table 10, Figure 17). These proportions are derived from creel survey estimates only because some of the lodge rockfish catch data provided was not broken down by species.

Historically, halibut, lingcod and rockfish annual catches vary based on areas surveyed and access to salmon (Figure 18).

3.3 BIOLOGICAL DATA

2.3.1 Chinook and Coho

In 2001, 2,462 chinook were inspected for adipose fin clip marks and the presence of a coded wire tag. Of the number inspected, 3% were adipose-clipped chinook with coded wire tags and 4% were adipose-clipped chinook with no coded wire tag. No electronic response to the adipose fin clipped fish could be due to wand error or no coded wire tag (note: the 1998 brood year mass marked chinook which were adipose clipped but not tagged). Total number of chinook inspected in the creel survey by month and area is shown in Table 6. The submission rate is a measure of the difference between the creel survey observed mark incidence and the submitted mark incidence. It is also referred to as the awareness factor. During the creel survey period there were 251 marks submitted from the creel survey and voluntary head depots in Areas 23 to 27. The submission rate of marks from Barkley Sound was 0.12 for 2001 (Appendix H); this rate ranges from 0.08 to 0.51 from 1992 to 1999. Of the marks submitted 15 were WCVI origin, 18 were from other Georgia Strait and Fraser River, and 218 of U.S. origin (Appendix I).

Among the 2,344 coho examined for marks, 53% were adipose fin clipped and 5% had coded wire tags (Table 7). The largest observed proportion of adipose fin clips was found in Area 23B. These numbers do not include adipose clipped fish retained by the lodges. Submission rates for coho marks were not calculated for 2001 due to the abundance of mass marked coho. In 2001, 530 fin clipped coho heads were submitted, of these 74 tags were recovered and 456 had no tag. Included in the tags recovered were 52 WCVI origin, 13 Georgia Strait and Fraser River, and 9 of U.S. origin (Appendix J).

2.3.2 Otolith Thermal Marks

Thermal marking is a means of marking hatchery fish. With thermal marking, 100% of the hatchery fish are marked. By altering the appearance of the otolith increments through short-term temperature manipulations to create a predetermined pattern used for determining hatchery contribution to catch and escapement (and thereby, exploitation rate).

Due to low incidence of coded wire tags from the indicator stock (Robertson Creek Hatchery/ RCH) otoliths were used to estimate exploitation rate. A sampling program was implemented in 2000 and 2001 to obtain otoliths from chinook that were caught during August and September by recreational fishermen along the WCVI (Hargreaves et al, 2001). Terminal management actions were evaluated using otoliths.

In 2001, management actions taken to prevent the retention of Somass chinook stocks were successful in that only 26 RCH thermal marks were recovered in 718 samples (3.6%) taken from the Northern and WCVI Sport fisheries (Table 9).

In 2000, 7 Robertson Creek Hatchery thermal marks were recovered from 947 otolith samples taken (0.7%) in Northern and WCVI sport fisheries (Table 9).

4.0 SUMMARY

A sport fishery creel survey was conducted in the WCVI in 2001 in order to estimate the catches of all the important recreational finfish species and the total sport fishing effort (boat trips). In this report, data are presented by both month and Statistical Areas. Comparisons are made to previous data to determine trends in catch and effort. From the catch and effort estimates catch successes could be calculated. This data also provide estimate numbers of chinook and coho salmon with adipose fin clips.

The increase in coho catch from 7,070 in 2000 to 38,865 in 2001 was related to increased abundance and fishing opportunities in 2001, than in the previous 3 years for coho. Chinook catches also increased with the increase in effort from 2000. Effort has increased 15% to 73,462 from 62,710 boat trips in 2000. Chinook catch has increased 20% to 51,146 from 40,942 in 2000. Total salmon catch success has increased from 1.31 in 2000 to 2.19 in 2001.

In 2001, sport fishers made an estimated 76,240 boat trips in the WCVI. A total of 5,802 actively fishing boat parties, were interviewed at a monthly maximum of 19 landing sites in the WCVI creel survey area. This sampling represents approximately 8.8% of the total number of boat trips conducted by sport fishers in the WCVI in 2001. A total of 145 effort counts were also conducted to take "snapshot" counts of fishing effort.

In 2001, sport fishers in the WCVI landed an estimated total finfish catch of 235,367 pieces of which 75% were salmon and 25% were groundfish. The 166,837 landed salmon consisted of 52,354 chinook, 38,865 coho, 30 chum, 5,676 pink salmon and 69,912 sockeye salmon. Anglers released an additional 57,142 legal sized chinook and coho. Catch success per boat trip averaged 2.18 for salmon (all species) and 0.76 for groundfish. The 58,169 landed groundfish consisted of 18,415 halibut, 7,834 lingcod, and 31,920 rockfish.

Among salmon examined for marks, 7.0% of chinook and 0.53% of coho had adipose fin clips. Of the fin clipped heads submitted, 251 chinook coded wire tags and 74 coho coded wire tags were recovered.

5.0 ACKNOWLEDGMENTS

I would like to thank the creel surveyors (Shaunee Lauder, Joanne Verhaeghe, Hank & Thelma Buitendyk, Peggy Fletcher, Jan Carter, Justin Erikson, Luke Osenenko, Anthony Sutton, Helen Dunn and the Pacheedaht First Nation) for their flexibility to the changing demands of the creel survey; private marina, boat ramp and lodge owners for their valuable assistance and co-operation. Thanks also to the many thousands of anglers who participated voluntarily in the survey.

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Fisneries and Oceans Canada

Sport Fishing Creel Survey

Interview#_____ Page____of____

Landing Site#_____ Interviewer#_____

Date___/___/___
DD/ MM/ YY

Assessment Code
0 = Complete Form
1 = Marks Incomplete
2 = Shell Fishing Only
3 = Not Inspected
4 = Refusal
5= Incomplete Form

Today's Boat Trip Completed

1. Number of Anglers:_____
2. Time of Landing(24Hrs) ____:____ TimeBlock_____
3. Sport Fishing(Y=1 N=0) _____ Guided? (Y=1 N=0) _____
4. Residence of Anglers: BC_____ Rest of Can_____ US_____ Other_____
5. Time of Departure(24Hrs) ____:____ Length of Boat Trip(Hrs) _____
6. Time Lines were in the water (Mark Appropriate time blocks)
7. Number of lines in the water for TOTAL fishing party_____

☐ 1) Before 7:00
☐ 2) 7:00 – 7:59
☐ 3) 8:00 – 8:59
☐ 4) 9:00 – 9:59
☐ 5) 10:00 – 10:59
☐ 6) 11:00 – 11:59
☐ 7) 12:00 – 12:59
☐ 8) 13:00 – 13:59
☐ 9) 14:00 – 14:59
☐ 10) 15:00 – 15:59
☐ 11) 16:00 – 16:59
☐ 12) 17:00 – 17:59
☐ 13) 18:00 – 18:59
☐ 14) 19:00 – 19:59
☐ 15) 20:00 – 20:59
☐ 16) After 21:00

8. **Catch Summary**

Stat Sub Area:		Time:	Gear Code:
Primary Fishing Location		Chart:	Site:
Species	**Kept**	**R.Legal**	**R.Sublegal**

Stat Sub Area:		Time:	Gear Code:
Primary Fishing Location		Chart:	Site:
Species	**Kept**	**R.Legal**	**R.Sublegal**

Species Codes

Salmon	Rockfish	GroundFish	
Chinook 124	Black 426	Cabezon 540	Unknown 723
CN <77 125	Canary 437	Dogfish 044	
CN 77+ 126	China 431	Sole Rock 621	
Coho W 115	Copper 407	Starry Floun 631	
Coho H 114	Quillback 424	Mackeral 369	
Chum 112	Yelloweye 442	Greenling 459	
Pink 108	Unknown 389	Halibut 614	
Sockeye 118		Lingcod 467	
Unknown 106		Ratfish 065	

Stat Sub Area:		Time:	Gear Code:
Primary Fishing Location		Chart:	Site:
Species	**Kept**	**R.Legal**	**R.Sublegal**

9. **Coded Wire Tag Information**

	Adipose Clipped			Adipose Unclipped		
Summary	Total	Beep	No Beep	Total	Beep	No Beep
Chinook						
Coho						

Gear Codes

Troll W/DR + bait	1	Jigging	6
Troll w/DR + lure	2	Traps	7
Troll w /bait	3	Dive	8
Troll w/lure	4	Fly Fishing	9
Mooching w/bait	5	Dig/Beach	10

10. How Much Time in Hrs was directed at the following?
Chinook_____ Coho_____ Salmon_____ Lingcod_____
Rockfish_____ Halibut_____ Groundfish_____
Shellfish_____ Other_____

11. Did you have a Seal encounter? ____ (Y = 1 N = 0)
1) How many of the following were lost?
CN___ CO___ PK___ SO___ CM___ AT___
SM___ RF___
2) Did you see your fish in the seal's mouth? ____
3) Did you land a partial fish? ____

12. **Shellfish Only** (units: 1 = Number, 2 = Weight in kg)

Target Species	Gear Code	Qt	Sub Area	Soak Time	Landed Species	Units	Kept	Rel

Shellfish Codes

Dungeness Crab 751	Shrimp 760	Squid 777
Rock Crab 752	Clams 708	Mussels 705
Any Crab 753	Oysters 707	Unknown 709
Crab Unk. 750	Scallops 706	
Prawns 761	Octopus 733	

Figure 1. Sample of 2001 interview form.

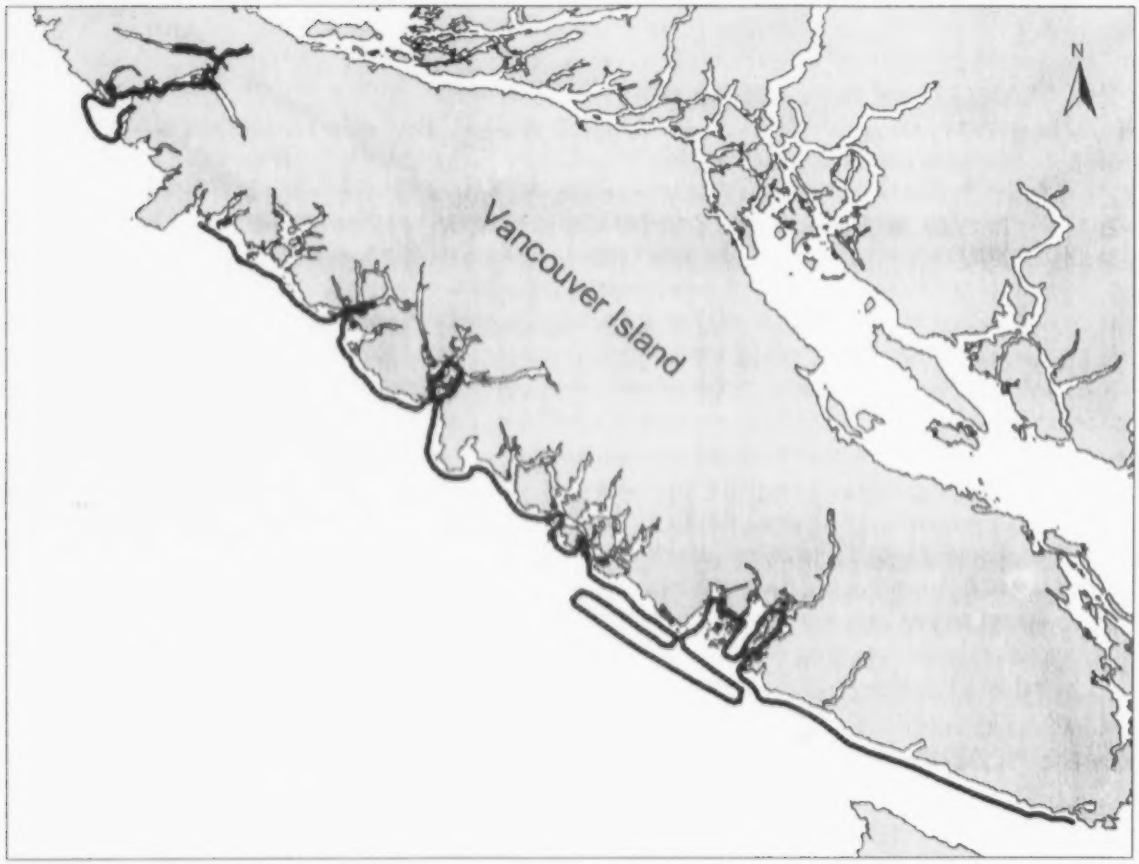


Figure 2. Overflight route for the WCVI, 2001.

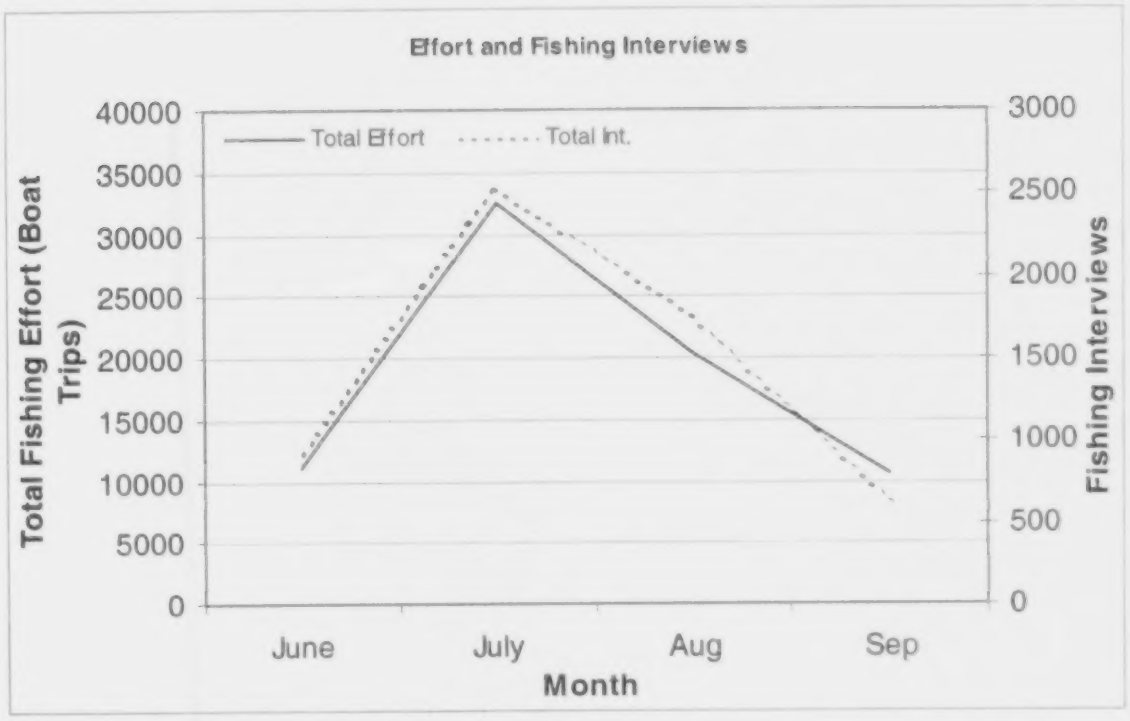


Figure 3. Comparison of monthly total fishing effort, monthly fishing interviews, WCVI, 2001.

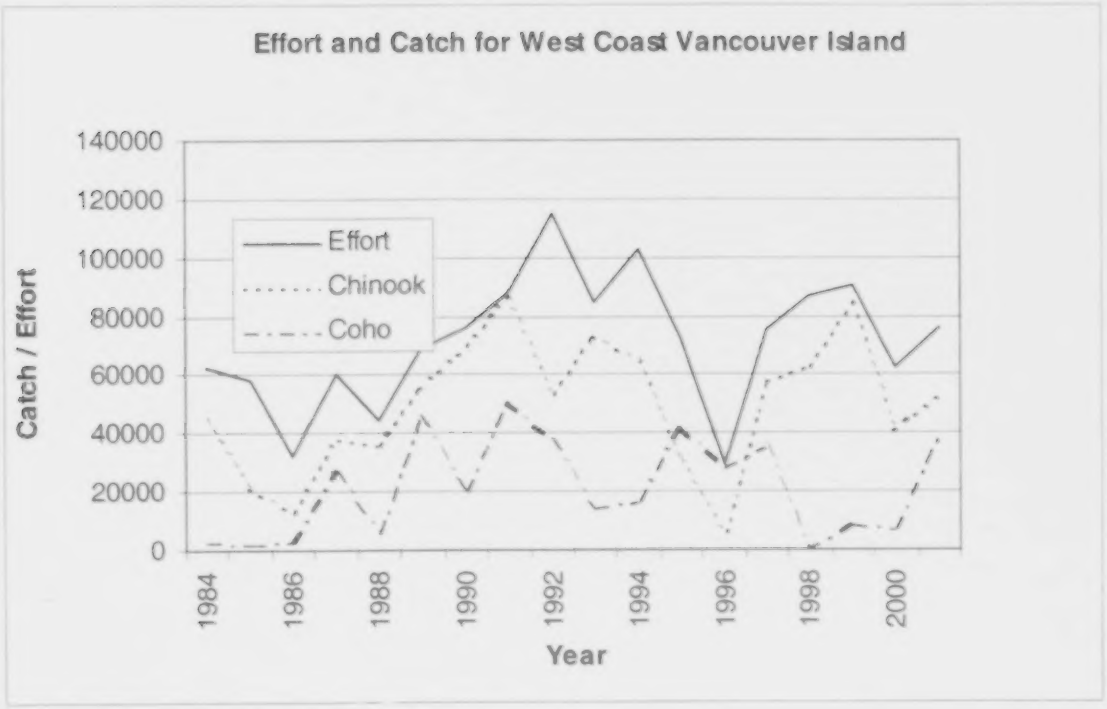


Figure 4. Tidal effort (boat trips) statistics and sport catches of chinook and coho for the WCVI, 1984 - 2001.

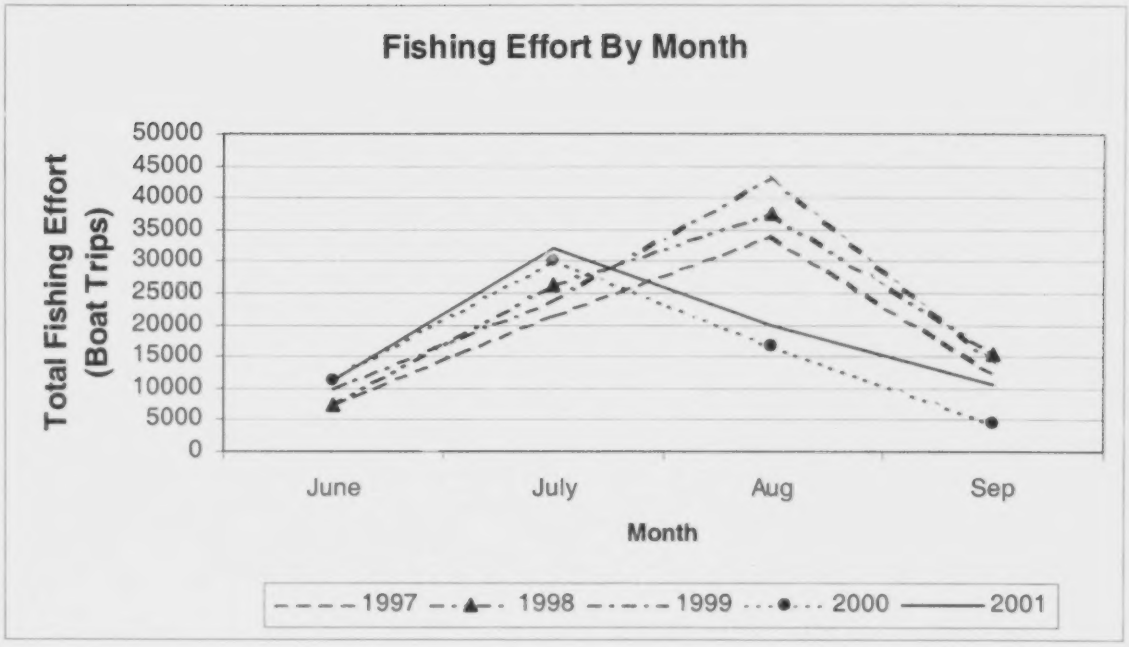


Figure 5. Monthly fishing effort estimates (boat trips) for West Coast Vancouver Island for 1997-2001.

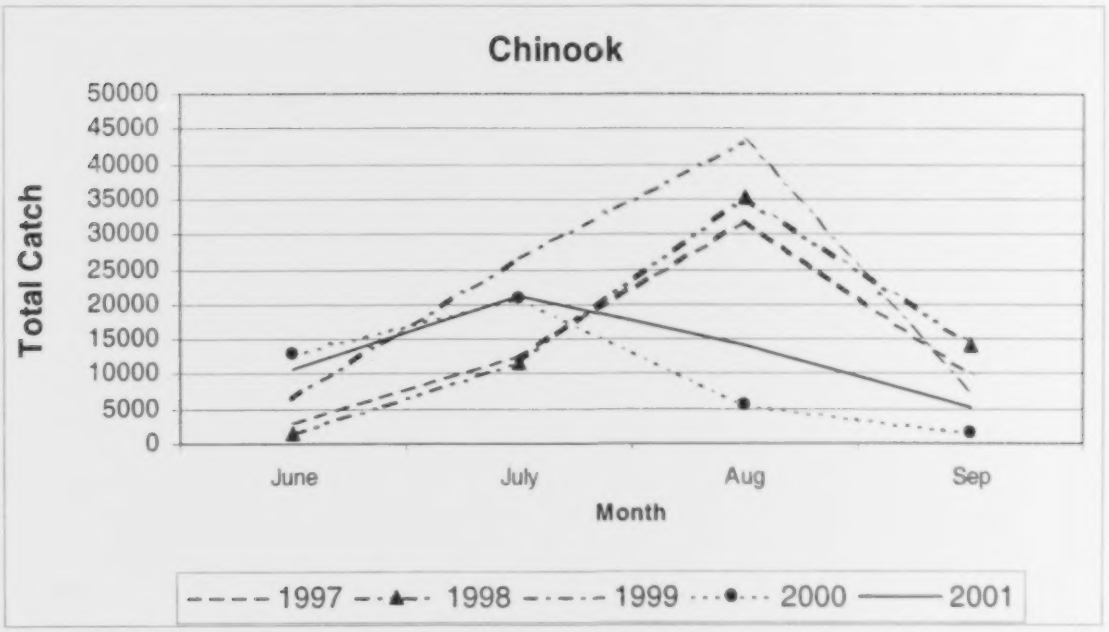


Figure 6. Monthly chinook catches for West Coast Vancouver Island, 1997 - 2001.

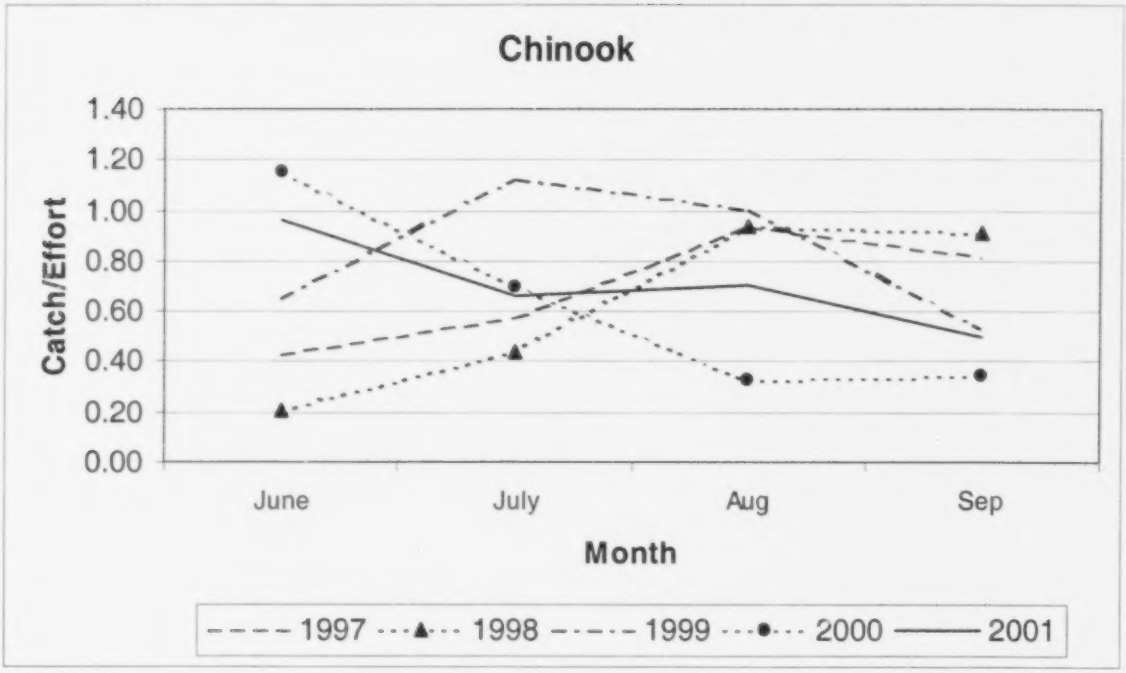


Figure 7. Monthly chinook catches per boat trip for WCVI, 1997 - 2001.

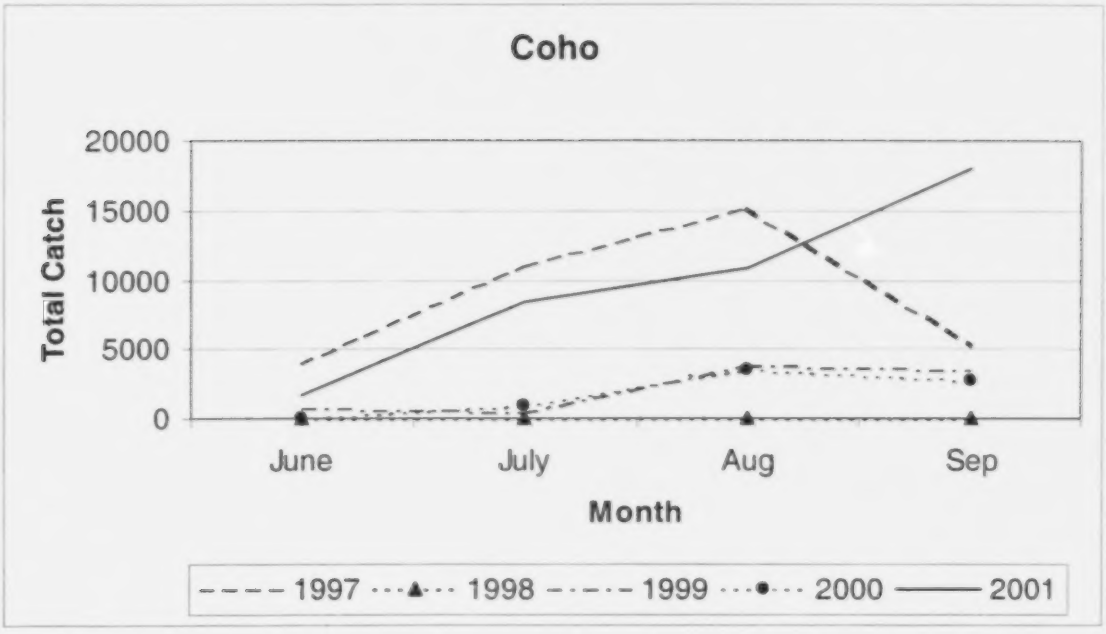


Figure 8. Monthly coho catches for West Coast Vancouver Island, 1997 - 2001.

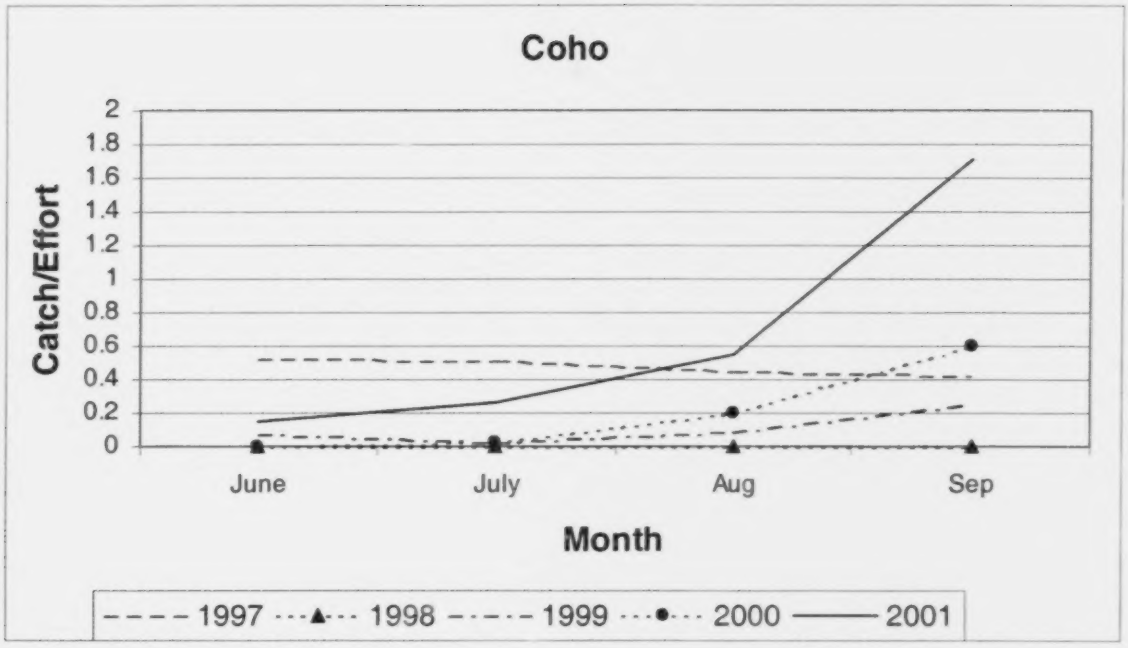


Figure 9. Monthly coho catches per boat trip for WCVI, 1997 - 2001.

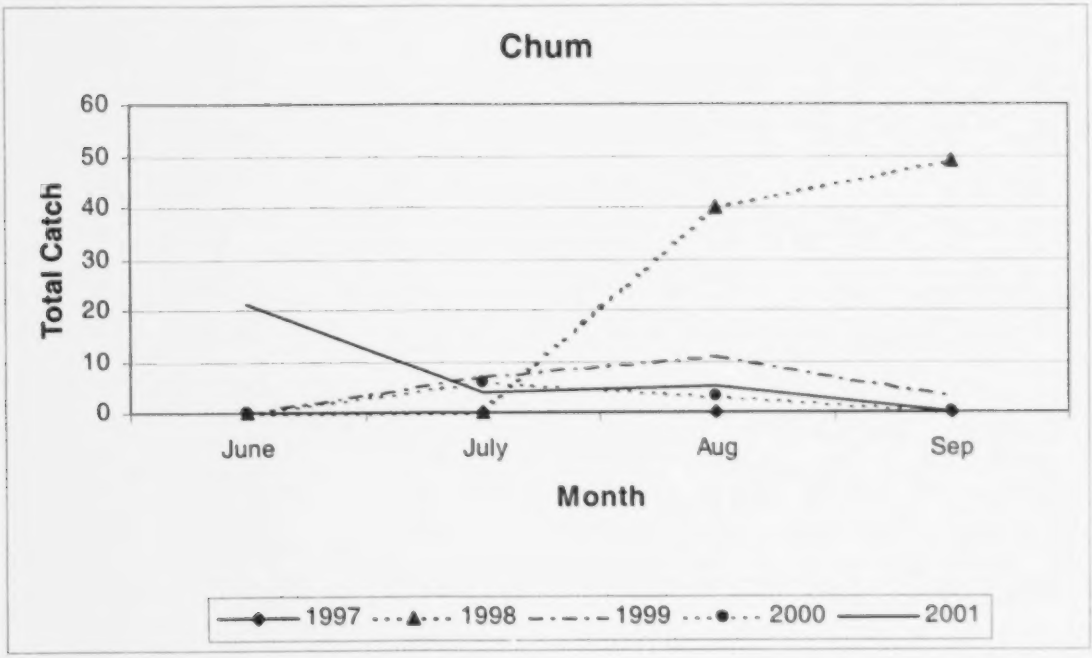


Figure 10. Monthly chum catches for West Coast Vancouver Island, 1997 - 2001.

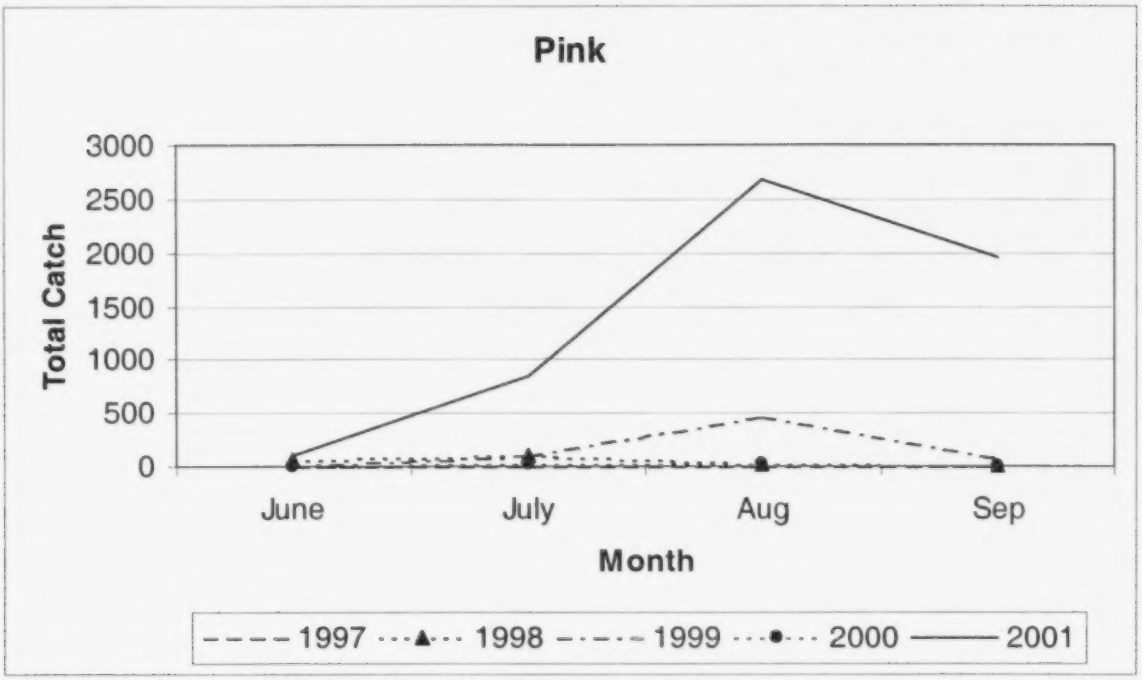


Figure 11. Monthly pink catches for West Coast Vancouver Island, 1997 - 2001.

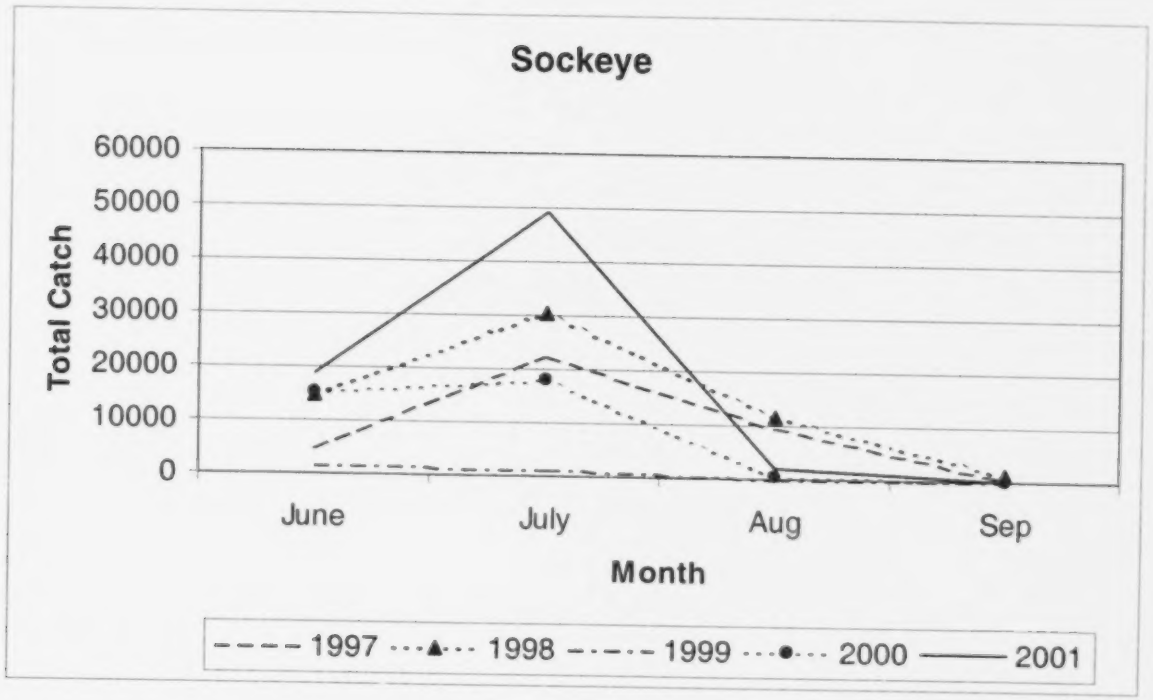


Figure 12. Monthly sockeye catches for West Coast Vancouver Island, 1997 - 2001.

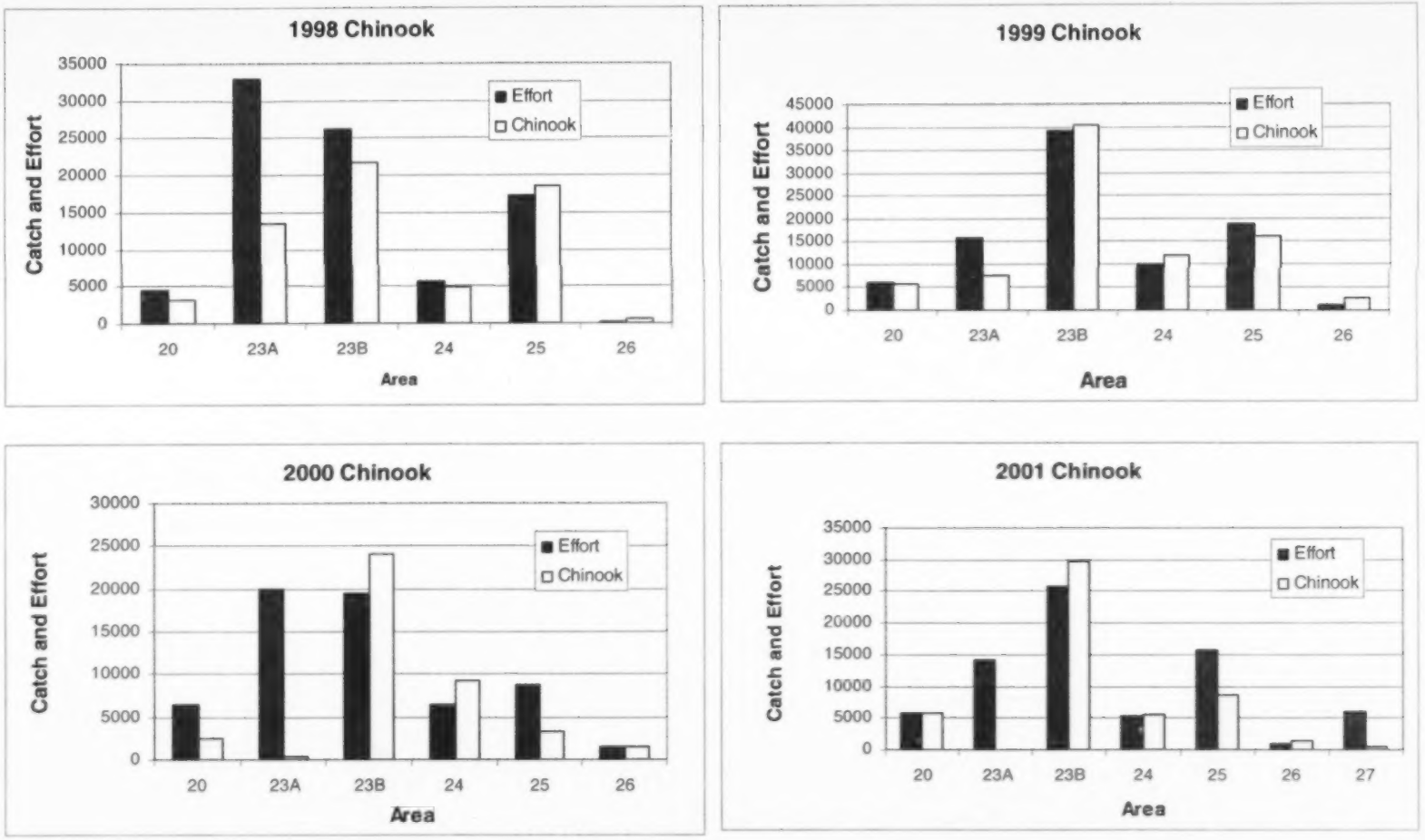


Figure 13. Total Chinook landed and total fishing effort expended by Statistical Area in the West Coast Vancouver Island sport fishery, 1998 - 2001.

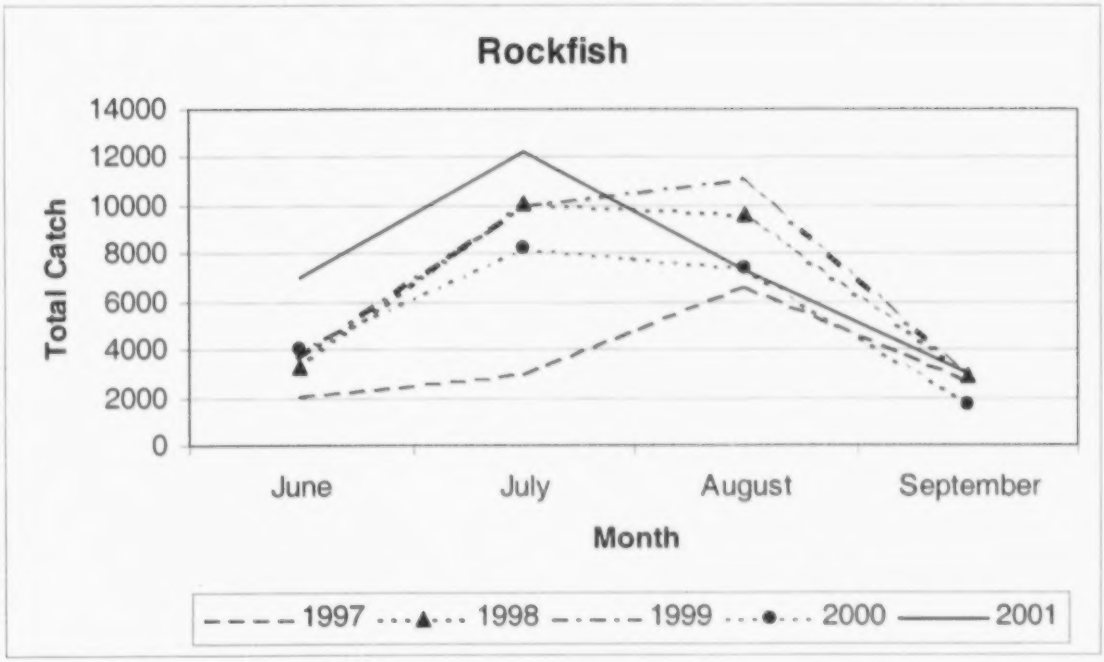


Figure 14. Monthly rockfish catches for West Coast Vancouver Island, 1997 - 2001.

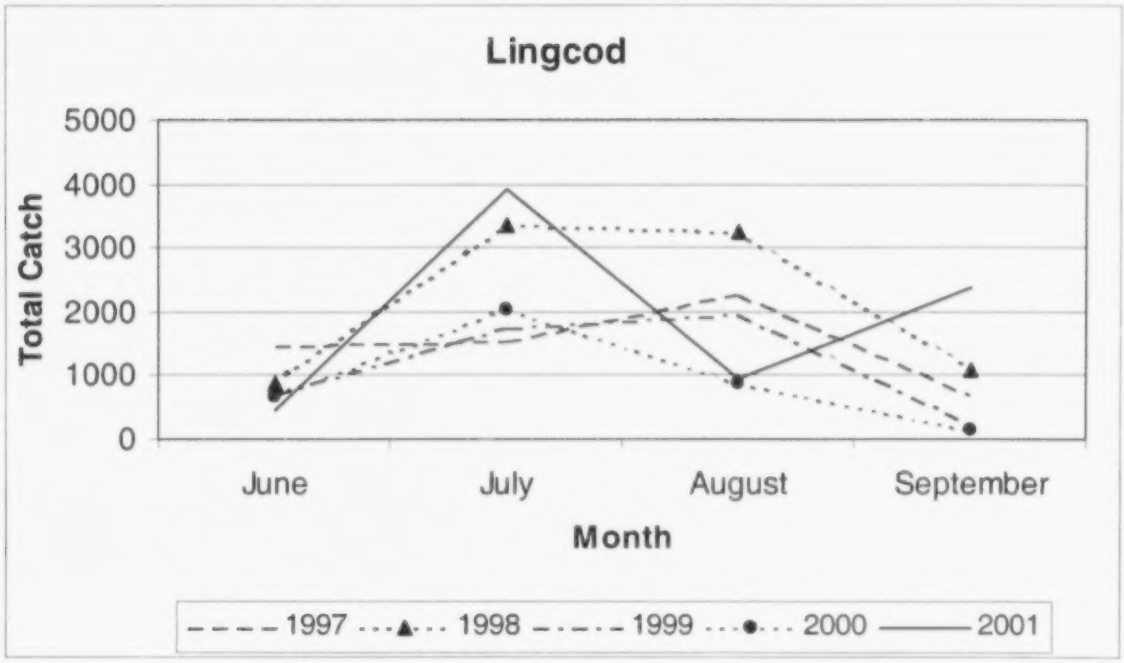


Figure 15. Monthly lingcod catches for West Coast Vancouver Island, 1997 - 2001.

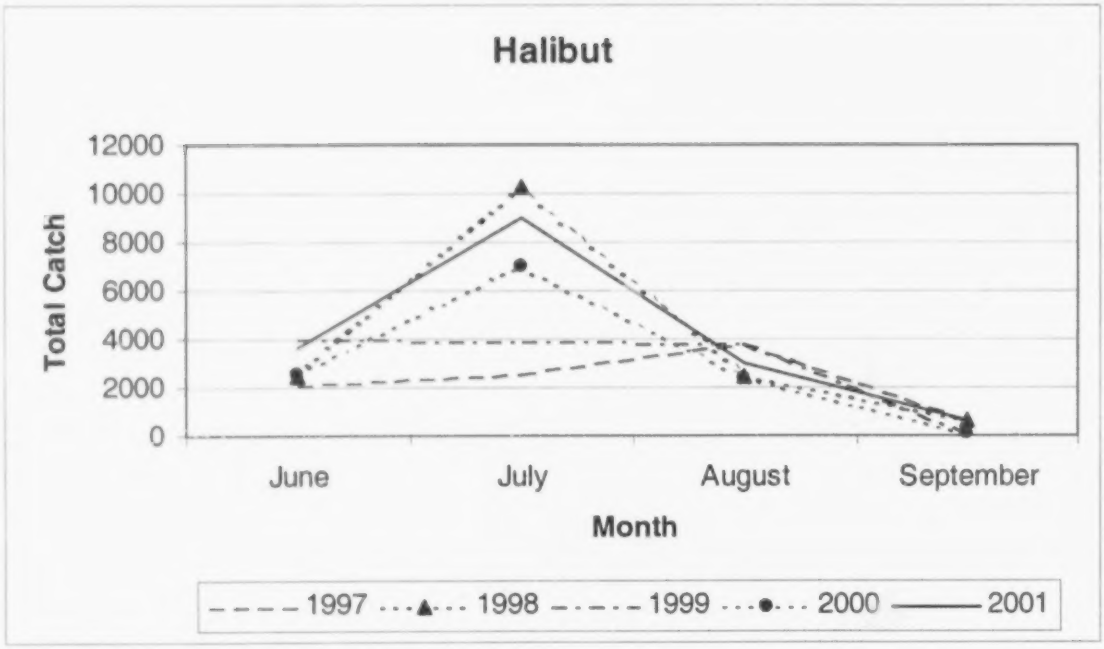


Figure 16. Monthly halibut catches for West Coast Vancouver Island, 1997 - 2001.

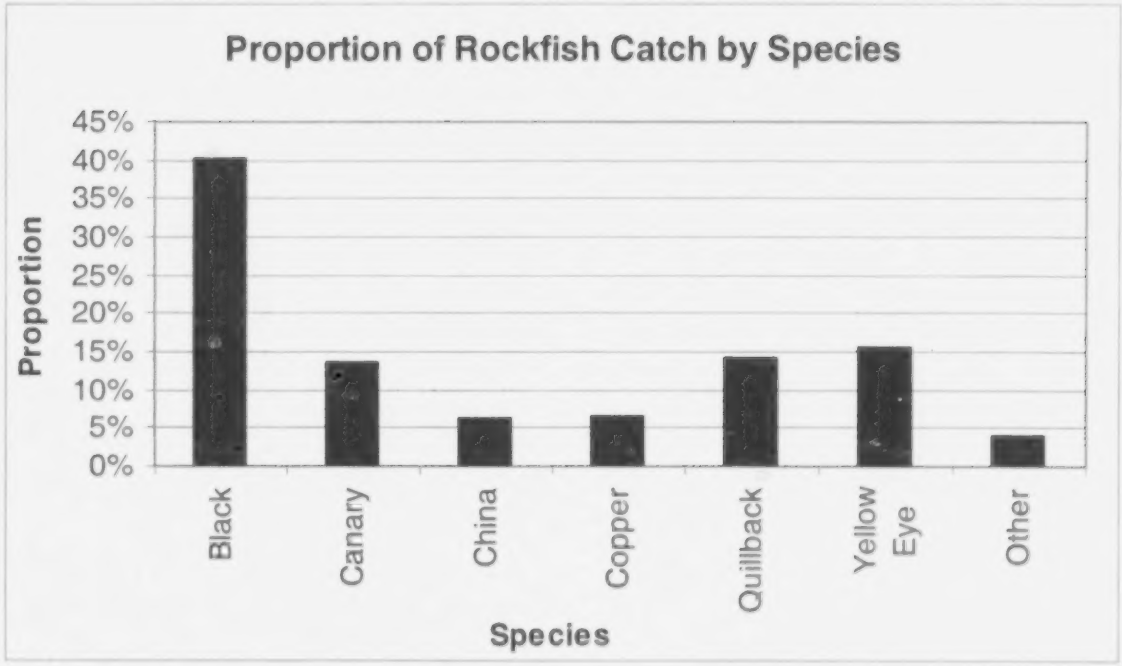


Figure 17. Proportion of rockfish catch by species for West Coast Vancouver Island, 2001.

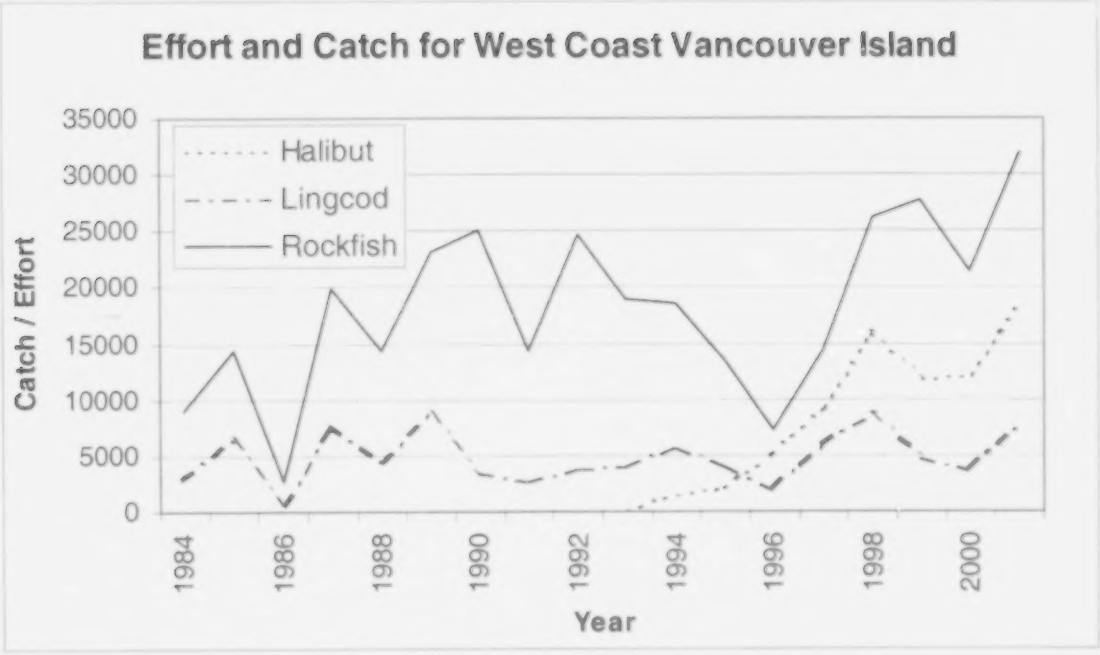


Figure 18. Sport catches of halibut, lingcod and rockfish for West Coast Vancouver Island, 1984-2001

Table 1. Number of fishing interviews by month and Statistical Area and number of boat counts by month for the West Coast Vancouver Island Creel Survey, 2001.

	Statistical Area									
Month	20-1	21/22	23	24	25	26	27	Total Int.	% Int.	Effort Counts
June	97	5	621	112	10	6	56	907	7%	40
July	322	40	1608	136	247	23	153	2529	8%	44
Aug	297	28	991	76	214	0	142	1748	9%	41
Sep	127	14	470	0	7	0	0	618	6%	20
Total	843	80	3690	324	478	29	351	5802	8%	145

Table 2. Tidal effort estimates and sport catches for West Coast Vancouver Island, 1984 - 2001.

		Catch							
Year	Effort	Chinook	Coho	Chum	Pink	Sockeye	Halibut	Lingcod	Rockfish
1984	62311	44162	2995	0	0	0	0	2818	9039
1985	57966	21587	2190	0	0	2797	0	6508	14285
1986	32555	13158	2579	0	0	21	0	617	2745
1987	59958	38283	26834	17	403	23228	0	7613	19888
1988	44822	35820	5626	0	34	374	0	4372	14358
1989	69241	55239	45268	60	975	794	0	8852	23163
1990	75804	69723	20177	0	6	14430	0	3437	25122
1991	87779	85983	50086	37	4006	81647	0	2693	14267
1992	115076	53010	37654	222	324	112664	0	3842	24608
1993	84591	73321	14322	99	691	107423	46	4008	18980
1994	102845	64846	16397	5	61	31299	1548	5817	18527
1995	72676	29857	41571	16	1340	5683	2175	4016	13353
1996	29297	5939	27771	0	42	33471	5253	1830	7199
1997	75068	57303	35097	0	0	37351	9101	5993	14413
1998	86632	62250	0	89	182	57952	15802	8774	26262
1999	90798	84039	8488	21	640	3047	11874	4763	27737
2000	62710	40942	7070	9	40	33891	11960	3699	21335
2001	76240	52354	38865	30	5676	69912	18415	7834	31968

1984-1991 estimates are for Statistical Area 23 only.

1992-1993 estimates are for Statistical Area 23 and 24.

1994-1996 estimates are for Statistical Areas 23, 24 and 25.

1997-2000 estimates are for Statistical Areas 20-1, 23-26.

2001 estimates are for Areas 20-1, 21, 23-27.

1984-1986, 1988 estimates are for Aug - Sep.

1989-1992 estimates are for July - Sep.

1987, 1993 - 2001 estimates are from Jun - Sep.

Table 3. Fishing effort and catches by species and month for West Coast Vancouver Island, 2001.

			Catch								Legal Release	
Month	Type	Effort	Chinook	Coho	Chum	Sockeye	Pink	Halibut	Lingcod	Rockfish	Chinook	Coho
June	creel	9006	5893	1566	19	18725	107	2607	438	4382	5302	3903
	S.E.	2931	3740	1463	16	1861	95	1562	459	4863	10545	6423
	lodge	3735	5666	59	2	0	1	1641	20	4818	737	308
July	creel	29324	14364	7582	0	49073	815	8296	3792	9445	2213	10808
	S.E.	8305	8910	4113	0	2913	393	5811	2036	5574	4639	13071
	lodge	3277	6862	749	4	2	60	1848	172	2925	1920	5543
August	creel	17922	11147	9509	4	2111	2090	2371	869	5249	6151	12194
	S.E.	4684	3628	4301	4	372	1109	1620	696	4195	7626	13123
	lodge	2401	3210	1400	1	1	658	1024	169	2149	1209	2495
September	creel	9675	4102	17621	0	0	1692	595	2354	1156	1951	2041
	S.E.	2876	2505	7374	0	23	801	425	1873	1490	2657	3272
	lodge	900	1110	379	0	0	253	33	20	1844	95	272
Total	Creel	65927	35506	36278	23	69909	4704	13869	7453	20232	15617	28946
	Creel S.E.	18796	18783	17251	20	5169	2398	9418	5064	16122	25467	35889
	Lodge	10313	16848	2587	7	3	972	4546	381	11736	3961	8618

Lodge catch is added in directly and therefore has no associated error.
Includes Statistical Areas 20-1 to 27
Does not include all lodge releases. Some not reported in Area 23/24.

Table 4. Fishing effort and catches by species and Statistical Area for West Coast Vancouver Island, 2001.

			Catch								Legal Release	
Area	Type	Effort	Chinook	Coho	Chum	Sockeye	Pink	Halibut	Lingcod	Rockfish	Chinook	Coho
20-1	creel	5827	5752	111	0	456	1751	0	251	1696	614	1819
	S.E.	1223	1430	115	0	170	809	0	156	628	936	1088
21	creel	1248	352	0	0	0	107	1516	140	312	78	1460
	S.E.	516	249	0	0	0	92	757	95	210	188	1037
23A	creel	14136	8	7270	4	67551	0	0	5	51	650	635
	S.E.	1600	8	1652	4	3906	0	0	5	36	225	419
23B	creel	19248	18110	19819	15	1902	1796	7155	2995	4796	8723	7172
	S.E.	7081	10390	10068	12	1093	717	4088	2372	4471	14978	11358
	lodge	7803	12416	1184	3	2	787	3366	51	9804	2177	1766
24	creel	3568	2300	4715	4	0	206	267	204	1715	1134	8001
	S.E.	1183	1055	2137	4	0	141	120	224	1239	1578	9410
	lodge	1859	3207	822	0	1	57	634	20	1884	384	1614
25	creel	15711	8482	1835	0	0	0	2847	3244	2831	726	2567
	S.E.	4356	4746	1146	0	0	0	2417	1639	1943	2034	4235
26	creel	226	57	21	0	0	0	0	0	0	0	0
	S.E.	126	357	281	0	0	0	134	17	0	0	0
	lodge	651	1225	581	4	0	128	546	310	48	1400	5238
27	creel	5963	445	2507	0	0	844	2084	614	8831	3694	7290
	S.E.	2711	548	1852	0	0	639	1902	556	7447	5528	8342
Total	Creel	65927	35506	36278	23	69909	4704	13869	7453	20232	15619	28944
	Creel S.E.	18796	18783	17251	20	5169	2398	9418	5064	15974	25467	35889
	Lodge	10313	16848	2587	7	3	972	4546	381	11736	3961	8618

23A = Alberni Inlet, 23B = Barkley Sound and Offshore
Areas 23-27 include inshore and offshore areas.

Table 5. Monthly catch success (catches per boat trip) by species for West Coast Vancouver Island, 2001.

	Catch								Released	
Month	Chinook	Coho	Chum	Sockeye	Pink	Halibut	Lingcod	Rockfish	Chinook	Coho
June	0.91	0.13	0.00	1.47	0.01	0.33	0.04	0.72	0.47	0.33
July	0.65	0.26	0.00	1.51	0.03	0.31	0.12	0.38	0.13	0.50
August	0.71	0.54	0.00	0.10	0.14	0.17	0.05	0.36	0.36	0.72
September	0.49	1.70	0.00	0.00	0.18	0.06	0.22	0.28	0.19	0.22
Total	0.69	0.51	0.00	0.92	0.07	0.24	0.10	0.42	0.26	0.49

Table 6. Number of marked chinook observed by month and area for West Coast Vancouver Island, 2001.

Month		20-1	21	23A	23	24	25	26	27	Total
June	Inspected	38		1	277	158	4		2	481
	Ad. Beep	4		0	20	2	2		0	28
	Ad. No Beep	0		0	18	0	2		0	20
July	Inspected	175		4	591	172	22		10	974
	Ad. Beep	1		0	25	0	0		0	26
	Ad. No Beep	7		0	41	0	2		0	50
August	Inspected	363		0	411	72	34		11	924
	Ad. Beep	1		0	15	2	1		0	19
	Ad. No Beep	9		0	16	0	1		0	26
September	Inspected	60		0	19	0	0		0	83
	Ad. Beep	0		0	1	0	0		0	1
	Ad. No Beep	1		0	2	0	0		0	3
Total	Inspected	636		5	1298	402	60		23	2462
	Ad. Beep	6		0	61	4	3		0	74
	Ad. No Beep	17		0	77	0	5		0	99
Proportion of CWT's		0.01		0.00	0.05	0.01	0.05		0.00	0.03
Mark Incidence		0.04		0.00	0.11	0.01	0.13		0.00	0.07

Inspected = Visually and Electronically Inspected.
Ad. Beep = Adipose Clipped, Electronic Signal for Coded Wire Tag (CWT).
Ad. No Beep = Adipose Clipped, No electronic signal.
Data from creel interviews only.

Table 7. Number of marked coho observed by Area for West Coast Vancouver Island, 2001.

Month		20-1	21	23A	23	24	25	26	27	Total
June	Inspected	0		0	39	53	0		8	100
	Ad. Beep	0		0	0	3	0		0	3
	Ad. No Beep	0		0	10	7	0		0	17
July	Inspected	0		0	351	256	13		17	637
	Ad. Beep	0		0	25	22	0		0	47
	Ad. No Beep	0		0	86	52	0		2	140
August	Inspected	4		168	467	149	11		61	860
	Ad. Beep	0		2	16	35	2		0	55
	Ad. No Beep	0		128	259	49	1		0	437
September	Inspected	5		517	199	0	2		0	723
	Ad. Beep	0		7	8	0	0		0	15
	Ad. No Beep	2		386	120	0	0		0	508
Total	Inspected	9		685	1056	458	26		86	2320
	Ad. Beep	0		9	49	60	2		0	120
	Ad. No Beep	2		514	475	108	1		2	1102
Proportion of CWT's		0.00		0.01	0.05	0.13	0.08		0.00	0.05
Mark Incidence		0.22		0.76	0.50	0.37	0.12		0.02	0.53

Inspected = Visually and Electronically Inspected.
Ad. Beep = Adipose Clipped, Electronic Signal for Coded Wire Tag (CWT).
Ad. No Beep = Adipose Clipped, No electronic signal.
Data from creel interviews only.

Table 8. Fishing effort and catches by species and Pacific Salmon Treaty Area for West Coast Vancouver Island, 2001.

		Catch								Release	
	Effort	Chinook	Coho	Chum	Sockeye	Pink	Halibut	Lingcod	Rockfish	Chinook	Coho
Area 20	5827	5752	111	0	456	1751	0	251	1696	614	1819
Inside	27250	6423	22944	4	1999	966	2409	3163	8887	7077	13909
Outside	43163	40179	15810	26	67457	2959	16006	4420	21385	11889	21834
Total	76240	52354	38865	30	69912	5676	18415	7834	31968	19580	37562

Inside / Outside refer to PSC definitions in section 1.1.1.

Table 9. Thermally marked otoliths found in Northern and WCVI sport fisheries, 2000 and 2001.

Sample Site			Release Site								
2001	**Area**	**NO MARK**	**Chilliwack**	**Conuma**	**Nitinat**	**Quinsam**	**Robertson**	**Sarita**	**Tlupana**	***unknown***	**Total**
Northern	1	233		5	8	1	11			5	263
Terminal	23	5	1	1							7
	25	29		41	1				1		72
Offshore	123	253	11	9	4	3	10	5		4	299
	124	11					2				13
	125	11		8	2		2				23
	126	37	2				1			1	41
Total		579	14	64	15	4	26	5	1	10	718

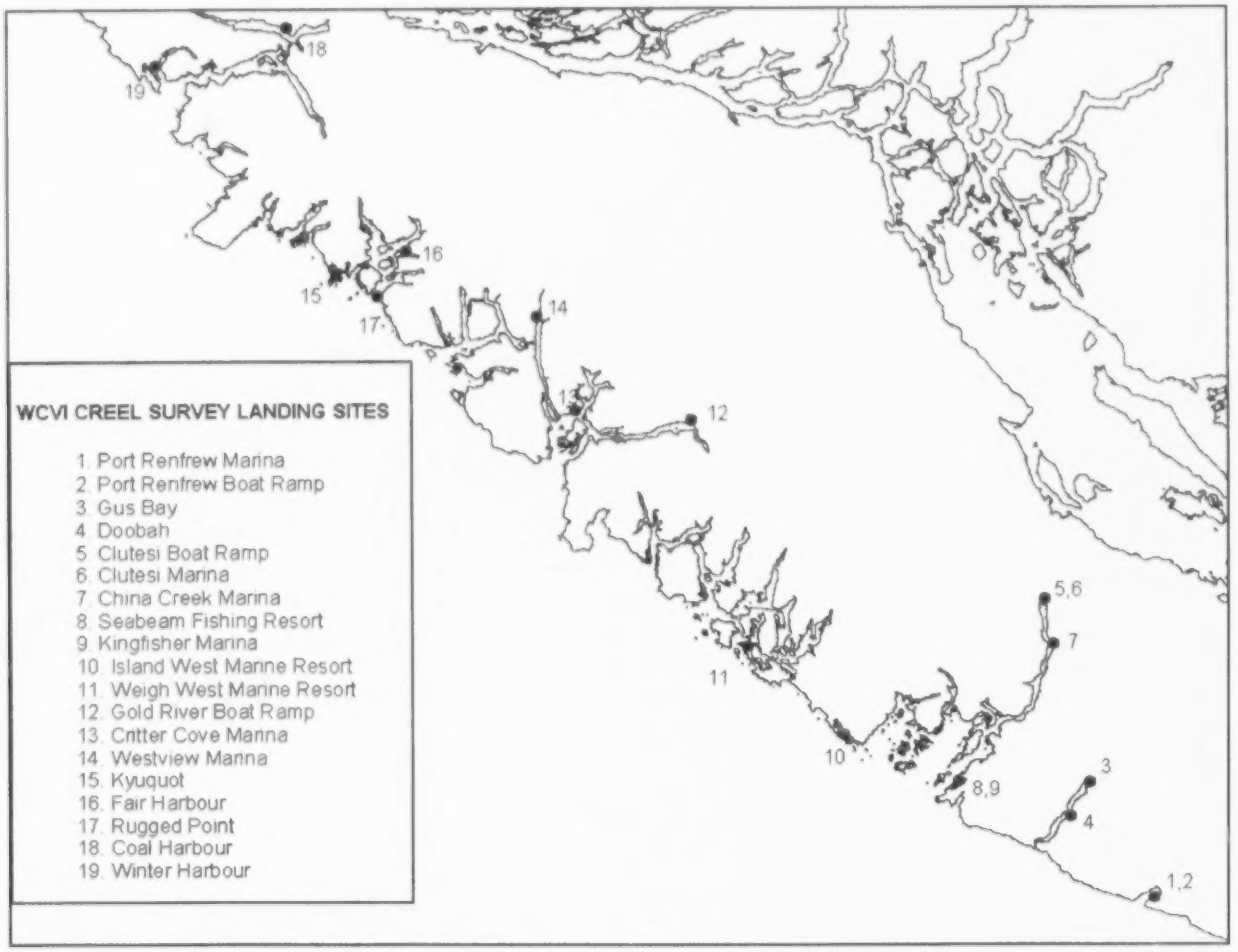
2000	**Area**	**NO MARK**	**Chilliwack**	**Conuma**	**Nitinat**	**Quinsam**	**Robertson**	**Sarita**	***unknown***	***possible***	**Total**
Northern	1	232	1	1	7	1	3	2	6	9	262
Terminal	20	1									1
	21	8			21		2				31
	23							1	2		3
	25	36	2	115			1		3		157
Offshore	123	327	21		1		1		15	24	389
	124	93		2				2	3	4	104
Total		697	24	118	29	1	7	5	29	37	947

unknown = positive thermal mark, release site unknown
possible = possible thermal mark, pattern not clear

Table 10. Proportion of rockfish catch by species and month, WCVI, 2001.

Month	Black	Canary	China	Copper	Quillback	Yellow Eye	Other
June	28%	2%	14%	8%	30%	16%	2%
July	31%	5%	2%	9%	13%	35%	4%
Aug	42%	9%	7%	9%	13%	10%	10%
Sep	59%	38%	1%	0%	1%	1%	0%
Average	40%	14%	6%	7%	14%	15%	4%

APPENDIX A. WCVI CREEL SURVEY STUDY AREA AND LANDING SITE LOCATIONS, 2001.



APPENDIX B1. WCVI FISHING EFFORT (# OF BOAT TRIPS) SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	711	85	3035	2642	715	514	49	1255	9006
	S.E.	179	64	399	1005	251	168	18	847	2931
	lodge	0	0	0	3330	404	0	1	0	3735
July	creel	1675	697	6812	7121	1636	9607	177	1599	29324
	S.E.	456	249	612	3095	478	3004	108	303	8305
	lodge	0	0	0	1838	1059	0	380	0	3277
August	creel	2257	389	1409	4277	1217	5264	0	3109	17922
	S.E.	176	144	114	1224	454	1011	0	1561	4684
	lodge	0	0	0	1861	282	0	258	0	2401
September	creel	1184	77	2880	5208	0	326	0	0	9675
	S.E.	412	59	475	1757	0	173	0	0	2876
	lodge	0	0	0	774	114	0	12	0	900
Total	creel	5827	1248	14136	19248	3568	15711	226	5963	65927
	S.E.	1223	516	1600	7081	1183	4356	126	2711	18796
	lodge	0	0	0	7803	1859	0	651	0	10313

APPENDIX B2. WCVI CHINOOK CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	424	0	1	4389	738	134	33	174	5893
	S.E.	162	0	1	2844	238	129	84	282	3740
	lodge	0	0	0	5051	615	0	0	0	5666
July	creel	1797	62	7	7125	693	4583	24	73	14364
	S.E.	592	44	7	4343	442	3148	273	61	8910
	lodge	0	0	0	4020	2108	0	734	0	6862
August	creel	2953	290	0	3072	869	3765	0	198	11147
	S.E.	390	205	0	984	375	1469	0	205	3628
	lodge	0	0	0	2360	368	0	482	0	3210
September	creel	578	0	0	3524	0	0	0	0	4102
	S.E.	286	0	0	2219	0	0	0	0	2505
	lodge	0	0	0	985	116	0	9	0	1110
Total	creel	5752	352	8	18110	2300	8482	57	445	35506
	S.E.	1430	249	8	10390	1055	4746	357	548	18783
	lodge	0	0	0	12416	3207	0	1225	0	16848

APPENDIX B3. WCVI COHO CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	9	524	358	10	4	661	1566
	S.E.	0	0	10	465	221	10	17	740	1463
	lodge	0	0	0	32	27	0	0	0	59
July	creel	10	0	0	3415	2679	807	17	654	7582
	S.E.	8	0	0	1994	994	475	264	378	4113
	lodge	0	0	0	150	372	0	227	0	749
August	creel	49	0	554	5134	1678	902	0	1192	9509
	S.E.	49	0	132	1957	922	507	0	734	4301
	lodge	0	0	0	712	351	0	337	0	1400
September	creel	52	0	6707	10746	0	116	0	0	17621
	S.E.	58	0	1510	5652	0	154	0	0	7374
	lodge	0	0	0	290	72	0	17	0	379
Total	creel	111	0	7270	19819	4715	1835	21	2507	36278
	S.E.	115	0	1652	10068	2137	1146	281	1852	17251
	lodge	0	0	0	1184	822	0	581	0	2587

APPENDIX B4. WCVI CHUM CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	0	15	4	0	0	0	19
	S.E.	0	0	0	12	4	0	0	0	16
	lodge	0	0	0	2	0	0	0	0	2
July	creel	0	0	0	0	0	0	0	0	0
	S.E.	0	0	0	0	0	0	0	0	0
	lodge	0	0	0	0	0	0	4	0	4
August	creel	0	0	4	0	0	0	0	0	4
	S.E.	0	0	4	0	0	0	0	0	4
	lodge	0	0	0	1	0	0	0	0	1
September	creel	0	0	0	0	0	0	0	0	0
	S.E.	0	0	0	0	0	0	0	0	0
	lodge	0	0	0	0	0	0	0	0	0
Total	creel	0	0	4	15	4	0	0	0	23
	S.E.	0	0	4	12	4	0	0	0	20
	lodge	0	0	0	3	0	0	4	0	7

APPENDIX B5. WCVI PINK CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	0	107	0	0	0	0	107
	S.E.	0	0	0	95	0	0	0	0	95
	lodge	0	0	0	1	0	0	0	0	1
July	creel	542	28	0	33	0	0	0	212	815
	S.E.	216	20	0	26	0	0	0	131	393
	lodge	0	0	0	3	1	0	56	0	60
August	creel	581	79	0	592	206	0	0	632	2090
	S.E.	141	72	0	247	141	0	0	508	1109
	lodge	0	0	0	555	31	0	72	0	658
September	creel	628	0	0	1064	0	0	0	0	1692
	S.E.	452	0	0	349	0	0	0	0	801
	lodge	0	0	0	228	25	0	0	0	253
Total	creel	1751	107	0	1796	206	0	0	844	4704
	S.E.	809	92	0	717	141	0	0	639	2398
	lodge	0	0	0	787	57	0	128	0	972

APPENDIX B6. WCVI SOCKEYE CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	18522	203	0	0	0	0	18725
	S.E.	0	0	1678	183	0	0	0	0	1861
	lodge	0	0	0	0	0	0	0	0	0
July	creel	382	0	47118	1573	0	0	0	0	49073
	S.E.	137	0	1995	781	0	0	0	0	2913
	lodge	0	0	0	1	1	0	0	0	2
August	creel	74	0	1911	126	0	0	0	0	2111
	S.E.	33	0	210	129	0	0	0	0	372
	lodge	0	0	0	1	0	0	0	0	1
September	creel	0	0	0	0	0	0	0	0	0
	S.E.	0	0	23	0	0	0	0	0	23
	lodge	0	0	0	0	0	0	0	0	0
Total	creel	456	0	67551	1902	0	0	0	0	69909
	S.E.	170	0	3906	1093	0	0	0	0	5169
	lodge	0	0	0	2	1	0	0	0	3

APPENDIX B7. WCVI LEGAL SIZED CHINOOK RELEASE SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	18	0	0	4662	194	0	0	429	5303
	S.E.	58	0	0	9148	232	0	0	1107	10545
	lodge	0	0	0	709	28	0	0	0	737
July	creel	48	0	11	1485	395	177	0	97	2213
	S.E.	214	0	9	2808	817	613	0	178	4639
	lodge	0	0	0	967	200	0	753	0	1920
August	creel	481	78	157	1636	545	87	0	3168	6152
	S.E.	452	188	50	1972	529	192	0	4243	7626
	lodge	0	0	0	457	144	0	608	0	1209
September	creel	67	0	482	940	0	462	0	0	1951
	S.E.	212	0	166	1050	0	1229	0	0	2657
	lodge	0	0	0	44	12	0	39	0	95
Total	creel	614	78	650	8723	1134	726	0	3694	15619
	S.E.	936	188	225	14978	1578	2034	0	5528	25467
	lodge	0	0	0	2177	384	0	1400	0	3961

APPENDIX B8. WCVI LEGAL SIZED COHO RELEASE SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	0	1979	717	0	0	1207	3903
	S.E.	0	0	0	3879	701	0	0	1843	6423
	lodge	0	0	0	190	112	0	6	0	308
July	creel	169	123	0	2445	3734	1969	0	2368	10808
	S.E.	231	197	0	2810	4128	3339	0	2366	13071
	lodge	0	0	0	754	1015	0	3774	0	5543
August	creel	1365	1337	33	1594	3550	598	0	3715	12192
	S.E.	587	840	33	2053	4581	896	0	4133	13123
	lodge	0	0	0	690	434	0	1371	0	2495
September	creel	285	0	602	1154	0	0	0	0	2041
	S.E.	270	0	386	2616	0	0	0	0	3272
	lodge	0	0	0	132	53	0	87	0	272
Total	creel	1819	1460	635	7172	8001	2567	0	7290	28944
	S.E.	1088	1037	419	11358	9410	4235	0	8342	35889
	lodge	0	0	0	1766	1614	0	5238	0	8618

APPENDIX B9. WCVI HALIBUT CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	0	0	0	2245	140	0	0	222	2607
	S.E.	0	0	0	1151	46	0	84	281	1562
	lodge	0	0	0	1472	168	0	1	0	1641
July	creel	0	1108	0	3228	31	2761	0	1168	8296
	S.E.	0	465	0	2126	21	2355	50	794	5811
	lodge	0	0	0	1101	411	0	336	0	1848
August	creel	0	408	0	1087	96	86	0	694	2371
	S.E.	0	292	0	386	53	62	0	827	1620
	lodge	0	0	0	771	54	0	199	0	1024
September	creel	0	0	0	595	0	0	0	0	595
	S.E.	0	0	0	425	0	0	0	0	425
	lodge	0	0	0	22	1	0	10	0	33
Total	creel	0	1516	0	7155	267	2847	0	2084	13869
	S.E.	0	757	0	4088	120	2417	134	1902	9418
	lodge	0	0	0	3366	634	0	546	0	4546

APPENDIX B10. WCVI LINGCOD CATCH SUMMARY, 2001.

Month	Type	20	21	23A	23B	24	25	26	27	Total
June	creel	71	0	0	115	22	89	0	141	438
	S.E.	35	0	0	121	22	93	17	171	459
	lodge	0	0	0	14	5	0	1	0	20
July	creel	52	38	5	347	55	2933	0	362	3792
	S.E.	29	18	5	262	61	1419	0	242	2036
	lodge	0	0	0	11	4	0	157	0	172
August	creel	80	102	0	227	127	222	0	111	869
	S.E.	34	77	0	174	141	127	0	143	696
	lodge	0	0	0	22	5	0	142	0	169
September	creel	48	0	0	2306	0	0	0	0	2354
	S.E.	58	0	0	1815	0	0	0	0	1873
	lodge	0	0	0	4	6	0	10	0	20
Total	creel	251	140	5	2995	204	3244	0	614	7453
	S.E.	156	95	5	2372	224	1639	17	556	5064
	lodge	0	0	0	51	20	0	310	0	381

APPENDIX B11. WCVI ROCKFISH CATCH SUMMARY, 2001.

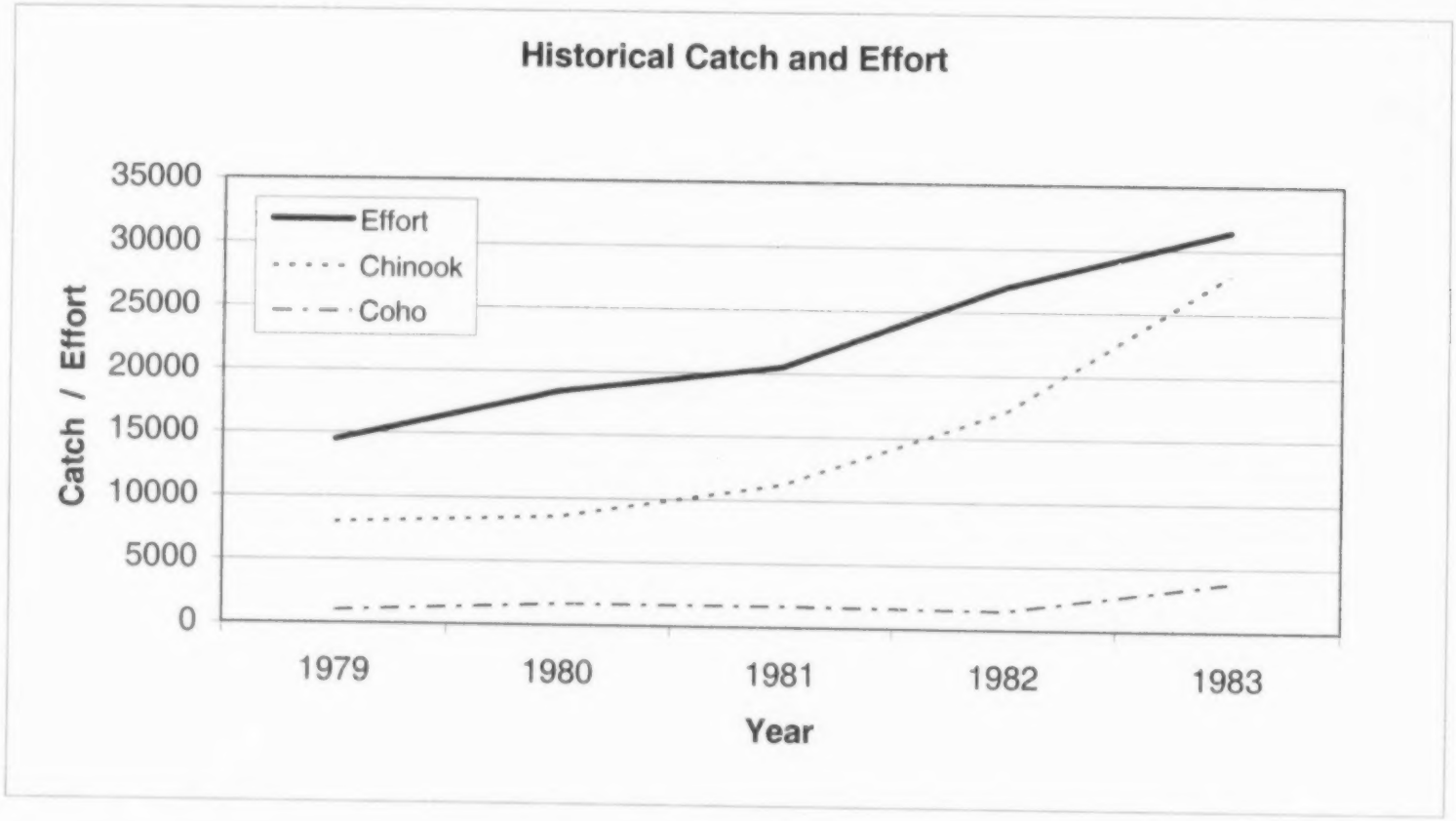
Month	type	20	21	23A	23B	24	25	26	27	Total
June	creel	477	0	9	764	225	126	0	2781	4382
	S.E.	155	0	10	758	151	135	118	3536	4863
	lodge	0	0	0	4287	531	0	0	0	4818
July	creel	502	170	34	2258	736	2652	0	3093	9445
	S.E.	249	98	20	1639	535	1779	30	1224	5574
	lodge	0	0	0	1929	974	0	22	0	2925
August	creel	574	142	8	761	754	53	0	2957	5249
	S.E.	147	112	6	661	553	29	0	2687	4195
	lodge	0	0	0	1972	160	0	0	0	2149
September	creel	143	0	0	1013	0	0	0	0	1156
	S.E.	77	0	0	1413	0	0	0	0	1490
	lodge	0	0	0	1616	219	0	9	0	1844
Total	creel	1696	312	51	4796	1715	2831	0	8831	20232
	S.E.	628	210	36	4471	1239	1943	148	7447	16122
	lodge	0	0	0	9804	1884	0	31	0	11736

APPENDIX C1. TIDAL EFFORT STATISTICS AND SPORT CATCH ESTIMATES FOR THE WCVI, 1979-1983.

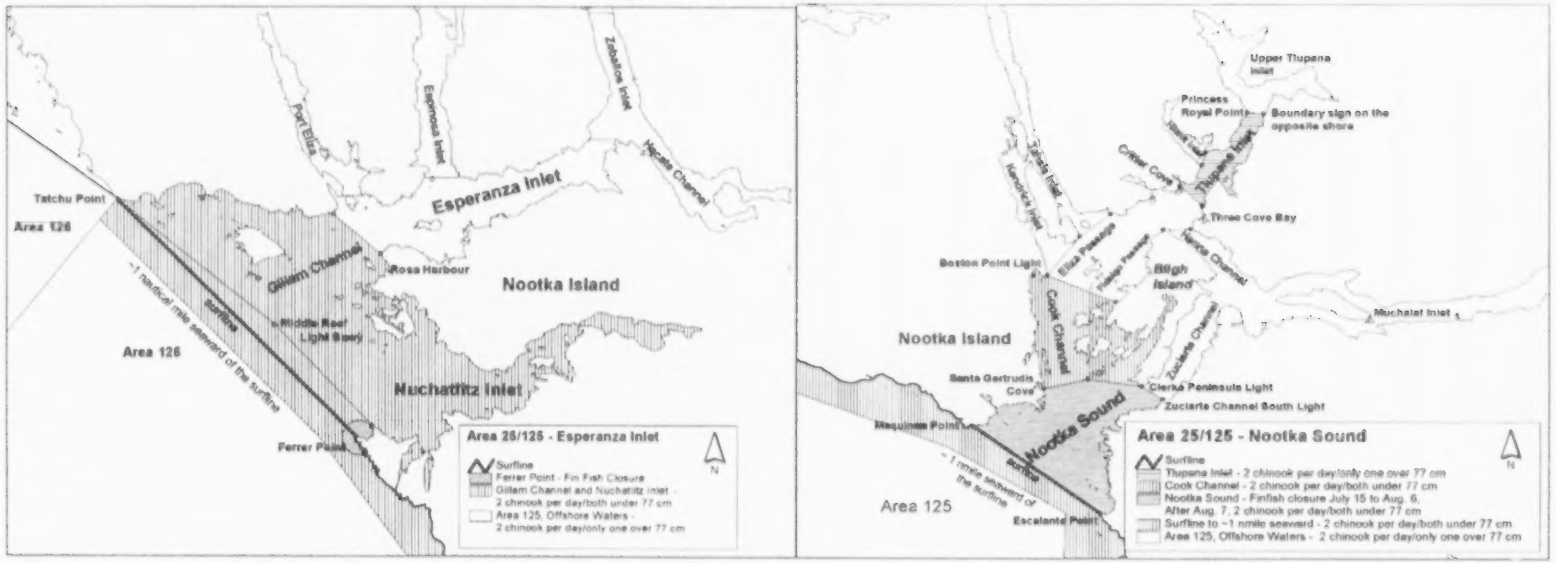
Year	Effort	Chinook	Coho	Chum	Pink	Sockeye	Lingcod	Rockfish
1979	14448	7964	1022	41	21	38	9125#	5625#
1980	18400	8539	1655	495	0	68	1785	1325
1981	20492	11230	1655	508	1	19	-	-
1982	27000	17100	1500	200	0	200	1000	500
1983	31400	28000	3800	300	0	5700	-	-

Data collected from notes by Fishery Officers, D. Girodat and B. Kannester.
- number is in pounds.
1979 - on water interviews and boat counts
1980 - no comments on methodology
1981- 1983 - catch per boat day / boat days

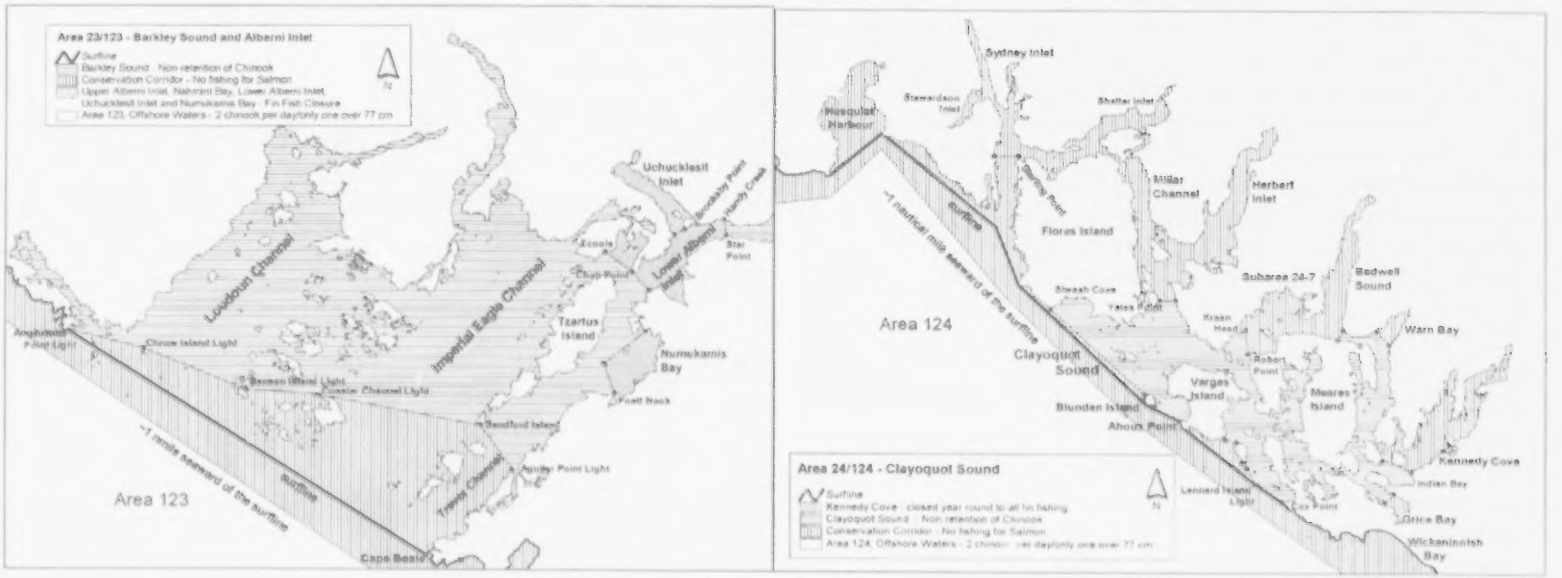
APPENDIX C2. HISTORICAL CATCH AND EFFORT GRAPH OF CHINOOK AND COHO FOR AREA 23, 1979 TO 1983. See APPENDIX C1 for comments.



APPENDIX D1. CHINOOK CONSERVATION CORRIDOR, NWVI, 2001.


Port Eliza
Esperanza Inlet
Zeballos Inlet
Hecate Channel
Esperanza Inlet
Tatchu Point
Area 126
Gillam Channel
Rosa Harbour
Nootka Island
Middle Reef Light Buoy
Surfline
~1 nautical mile seaward of the surfline
Area 126
Nuchatlitz Inlet
Ferrer Point
Area 25/125 - Esperanza Inlet
Surfline
Ferrer Point - Fin Fish Closure
Gillam Channel and Nuchatlitz Inlet - 2 chinook per day/both under 77 cm
Area 125, Offshore Waters - 2 chinook per day/only one over 77 cm
N
Upper Tlupana Inlet
Princess Royal Point
Boundary sign on the opposite shore
Tlupana Inlet
Critter Cove
Three Cove Bay
Kendrick Inlet
Boston Point Light
Ellis Passage
Hecate Channel
Bligh Island
Muchalat Inlet
Nootka Island
Cook Channel
Zuciarte Channel
Santa Gertrudis Cove
Cleriza Peninsula Light
Zuciarte Channel South Light
Nootka Sound
Area 125
~1 nmile seaward of the surfline
Escalante Point
Area 25/125 - Nootka Sound
Surfline
Tlupana Inlet - 2 chinook per day/only one over 77 cm
Cook Channel - 2 chinook per day/both under 77 cm
Nootka Sound - Finfish closure July 15 to Aug. 6. After Aug. 7, 2 chinook per day/both under 77 cm
Surfline to ~1 nmile seaward - 2 chinook per day/both under 77 cm
Area 125, Offshore Waters - 2 chinook per day/only one over 77 cm
N

APPENDIX D2. CHINOOK CONSERVATION CORRIDOR, SWVI, 2001.



APPENDIX E. HISTORICAL REGULATION CHANGES AFFECTING THE WCVI SPORT FISHERY.

1984	Robertson Creek hatchery chinook was designated as an indicator stock used to evaluate the status of west coast Vancouver Island chinook stocks (Pacific Salmon Treaty chinook rebuilding program subsequent to 1985). Only Statistical Area 23 surveyed.
1992	Survey expanded to include Statistical Area 24.
1994	Daily chinook limit is reduced to 2 chinook/day. Daily coho possession limit reduced to zero.
1996	Daily possession limit of chinook reduced from 2/day to zero on August 1.
1997	Chinook non-retention after July 25 (NWVI) and August 1 (SWVI). Some areas allowed chinook retention of 2 / day under 50cm (20-1,2,3,4; 21, 23 to 27; 121,123 to 127).
1998	Coastwide barbless hook restriction for salmon fishing. Some total finfish closures due to Thompson River coho concerns. Terminal areas open for salmon fishing but non-retention for coho.
1999	Coastwide barbless hook restriction. In 1999, special management zones were introduced to most of West Coast Vancouver Island. Coho retention was limited to terminal areas of Area 23 and 24 (yellow zones) until Sept. 10 when it was expanded to include more outside areas (grey zones). New in 1999 was a requirement to determine catch in the offshore area (more than 1 mile offshore) versus the near shore area. Under the new PST agreement, a portion of the WCVI recreational fishery chinook catch must be accounted in the overall WCVI allowable catch as determined through an Abundance Based Management system.
2000	Chinook non-retention was implemented in Areas 23 and 24 as of August 1 and in Areas 26 and significant portions of 25 as of July 15. In areas open for retention of chinook the daily limit was set at two of which only one could be over 77 cm in length (slot limit). These measures were in effect until October 15. The most significant management measure in 2000 was implementation of a conservation (no salmon-fishing) corridor, generally extending one to two miles beyond the surf line. This corridor was implemented from July 15 to September 30 in Area 125 and from August 1 to September 30 in Areas 121 to 124. The daily limit for chinook in open areas was set at two per day of which only one could be over 77 cm in length from July 15 to September 30. Selective mark fisheries for coho in terminal areas of 23 and 24 starting July 1. Offshore retention of hatchery coho after August 24.
2001	Chinook non-retention was implemented in Areas 23 and 24 as of August 1 and in Areas 26 and significant portions of 25 as of July 15. Chinook conservation corridor still in effect with changes to Area 25 corridor location. In areas open for retention of chinook, slot limit still in effect. Coho selective mark fishery opened earlier offshore (August 1). Inshore selective mark fishery opened June 8.

APPENDIX F. SPECIES BREAK DOWN OF ROCKFISH

			# rockfish by species where indicated							
Month	Type	All Rockfish	Black	Canary	China	Copper	Quillback	Yellow Eye	Yellow Tail	Other
6	creel	4382	1112	61	562	329	1177	611	0	61
	lodge	4818	0	0	0	0	0	0	0	0
7	creel	9445	2926	509	209	830	1195	3336	5	394
	lodge	2925	0	0	0	0	3	19	0	0
8	creel	5249	2182	481	362	486	694	527	0	514
	lodge	2149	0	0	0	0	1	15	1	0
9	creel	1156	685	443	10	0	10	8	0	0
	lodge	1844	0	0	0	2	1	6	0	0
Total	creel	20232	6905	1494	1143	1645	3076	4482	5	969
	lodge	11736	0	0	0	2	5	40	1	0

Not all lodge data was broken down by species.

APPENDIX G. ESTIMATE OF PACIFIC SALMON TREATY COMPONENT OF CHINOOK CATCH IN WCVI RECREATIONAL FISHERY.

Year	Boat Trips	Inside (terminal)	Outside (AABM)
1992	115076	46968	18518
1993	84591	65604	23312
1994	102845	52526	10313
1995	72676	21675	13956
1996	29297	2266	10229
1997	71022	47355	6400
1998	82068	55697	4177
1999	84760	47163	31106
2000	56214	4468	38038
2001	70413	6423	40179

APPENDIX H. 2001 SPORT CAUGHT CHINOOK SUBMISSION RATES IN THE WCVI RECREATIONAL FISHERY.

Period		Area	Creel Survey Catch Estimates			Creel Survey Mark Samples				Estimated Marks in Catch			Submission Rates (Awareness Factors)					
Year	Month	Sub Areas	Catch Estimate	Catch Estimate StdDev	Var Catch Estimate	Mark Sample Size	Total Marks Observed*	Mark Incidence	Var Mark Incidence	Estimated Total Marks	Var Estimated Total Marks	StdDev Estimated Total Marks	Marks Submitted	Submitted Mark Incidence	Submission Rate	Var Submission Rate	StdDev Submission Rate	CV Submission Rate
2001	June 12-30	23a-b	1	1	1	1	0						0					
2001	July	23a-b	7	7	49	4	0						0					
2001	August	23a-b	0	0	0	0	0						1					
2001	September	23a-b	0	0	0	0	0						0					
2001	June	23c-m	2433	1603	2569609	134	22	0.1642	0.0010	399	78022	279	21	0.0086	0.0526	0.0014	0.0368	69.9276
2001	July	23c-m	4736	3036	9217296	257	31	0.1206	0.0004	571	147223	384	38	0.0080	0.0665	0.0020	0.0447	67.1656
2001	August	23c-m	155	207	42849	77	11	0.1429	0.0016	22	982	31	7	0.0452	0.3161	0.2002	0.4474	141.5369
2001	September	23c-m	0	0	0	3	1	0.3333	0.1111	0	0	0	0					
2001	June	123	1956	1241	1540081	143	16	0.1119	0.0007	219	23035	152	26	0.0133	0.1188	0.0068	0.0824	69.3495
2001	July	123	2389	1307	1708249	334	35	0.1048	0.0003	250	20847	144	33	0.0138	0.1318	0.0058	0.0760	57.6750
2001	August	123	2917	777	603729	334	20	0.0599	0.0002	175	3705	61	22	0.0075	0.1260	0.0019	0.0439	34.8490
2001	September	123	3524	2219	4923961	16	2	0.1250	0.0073	441	203393	451	1	0.0003	0.0023	0.0000	0.0023	102.3816
2001	June	24a-g	738	238	56644	158	2	0.0127	0.0001	9	57	8	42	0.0569	4.4959	13.1890	3.6317	80.7767
2001	July	24a-g	693	442	195364	172	0	0.0000	0.0000	0	0	0	28	0.0404				
2001	August	24a-g	869	375	140625	72	2	0.0278	0.0004	24	449	21	3	0.0035	0.1243	0.0119	0.1091	87.8051
2001	September	24a-g	0	0	0	0	0											
2001	June	25	134	129	16641	4	4	1.0000	0.0000	134	16641	129	10	0.0746	0.0746	0.0052	0.0718	96.2687
2001	July	25	4583	3148	9909904	22	2	0.0909	0.0039	417	203560	451	7	0.0015	0.0168	0.0003	0.0182	108.2902
2001	August	25	3765	1469	2157961	34	2	0.0588	0.0017	221	34869	187	6	0.0016	0.0271	0.0005	0.0228	84.3145
2001	September	25	0	0	0	0	0						1					
2001	June	26	33	84	7056	1	0						0					
2001	July	26	24	273	74529	0	0						3	0.1250				
2001	August	26	0	0	0	0	0						1					
2001	September	26	0	0	0	0	0						0					
2001	June	27	174	282	79524	2	0						0					
2001	July	27	73	61	3721	10	0						1	0.0137				
2001	August	27	198	205	42025	11	0						0					
2001	September	27	0	0	0	0	0						0					

* Total marks observed = all fin clipped chinook observed
See Table 6. For breakdown of electronic sampling

APPENDIX I. CODED WIRE TAGS RECOVERED FROM MARKED CHINOOK HEADS SUBMITTED DURING THE 2001 WCVI CREEL SURVEY.

Tagcode	Hatchery Site ProdArea	Hatchery Site Code-Name	Recovery Month	Catch Region Name	MRP Stat Area Code	Sport Site Code	Sport Site Name
0501020406	BRGT	0640-RINGOLD SPRINGS HATC	7	West Coast Vancouver Is Sport	26	KYUQ SD	KYUQUOT SOUND
051562	UPWA	1049-MAKAH NFH ON SOOES R	8	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
054347	LOCO	0695-SPRING CR NFH	7	West Coast Vancouver Is Sport	24	CLEL IS	CLELAND ISLAND
054349	LOCO	0695-SPRING CR NFH	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
054349	LOCO	0695-SPRING CR NFH	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
054350	LOCO	0695-SPRING CR NFH	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
054361	LOCO	0695-SPRING CR NFH	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
054363	LOCO	0695-SPRING CR NFH	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
054363	LOCO	0695-SPRING CR NFH	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
054521	LOCO	0679-KLICKITAT HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
054521	LOCO	0679-KLICKITAT HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
071253	LOCO	0686-BIG CR HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
071253	LOCO	0686-BIG CR HATCHERY	6	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
071253	LOCO	0686-BIG CR HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
071253	LOCO	0686-BIG CR HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
071253	LOCO	0686-BIG CR HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
091928	UPOR	0727-ROCK CR HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
092447	UPOR	1012-SALMON R HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
092449	UPOR	0723-ELK R HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
092517	LOCO	0690-KLASKANINE HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
092519	WILL	1826-CLACKAMAS HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
092519	WILL	1826-CLACKAMAS HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
092631	WILL	1826-CLACKAMAS HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
092632	WILL	0701-MARION FORKS HATCH	6	West Coast Vancouver Is Sport	24	TWFOUR	UNKNOWN 24
092632	WILL	0701-MARION FORKS HATCH	7	West Coast Vancouver Is Sport	26	KYUQ SD	KYUQUOT SOUND
092633	WILL	0701-MARION FORKS HATCH	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
092810	UPOR	0723-ELK R HATCHERY	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
180362	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	DIPL IS	DIPLOCK ISLAND
180363	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
181724	LWFR	0154-CHEHALIS R	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
181724	LWFR	0154-CHEHALIS R	8	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
182046	NWVI	0117-CONUMA R	7	West Coast Vancouver Is Sport	25	GOLD RV	GOLD RIVER
182352	SWVI	0114-NITINAT R	7	West Coast Vancouver Is Sport	23B	SAND IS	SANDFORD ISLAND
183114	SWVI	1901-TOFINO	8	West Coast Vancouver Is Sport	25	FERR PT	FERRER POINT
183161	NWVI	0117-CONUMA R	7	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
183161	NWVI	0117-CONUMA R	8	West Coast Vancouver Is Sport	25	NOOT SD	NOOTKA SOUND
183161	NWVI	0117-CONUMA R	8	West Coast Vancouver Is Sport	26	TWSIX	UNKNOWN 26
183161	NWVI	0117-CONUMA R	8	West Coast Vancouver Is Sport	25	HISN IN	HISNIT INLET
183162	NWVI	0117-CONUMA R	8	West Coast Vancouver Is Sport	25	FRIE CV	FRIENDLY COVE
183163	NWVI	0117-CONUMA R	7	West Coast Vancouver Is Sport	25	GOLD RV	GOLD RIVER
183213	GSVI	0118-COWICHAN R	6	West Coast Vancouver Is Sport	23B	G BE RK	
183354	LWFR	0107-CHILLIWACK R	7	West Coast Vancouver Is Sport	23B	CP BEAL	CAPE BEALE
183434	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	21	NITINAT	NITINAT
183747	SWVI	0114-NITINAT R	8	West Coast Vancouver Is Sport	25	FERR PT	FERRER POINT
183822	GSVI	0151-CHEMAINUS R	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
183831	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	AUST IS	AUSTIN ISLAND
183903	LWFR	0154-CHEHALIS R	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
183909	LWFR	0150-INCH CR	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
183910	SWVI	1901-TOFINO	9	West Coast Vancouver Is Sport	25	TWFIVE	UNKNOWN 25
184044	LWFR	0150-INCH CR	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184044	LWFR	0150-INCH CR	7	West Coast Vancouver Is Sport	23B	123 - 1	
184046	LWFR	0107-CHILLIWACK R	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184046	LWFR	0107-CHILLIWACK R	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184046	LWFR	0107-CHILLIWACK R	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184047	LWFR	0107-CHILLIWACK R	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
184048	LWFR	0107-CHILLIWACK R	7	West Coast Vancouver Is Sport	23B	123 - 1	
184048	LWFR	0107-CHILLIWACK R	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
184048	LWFR	0107-CHILLIWACK R	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184048	LWFR	0107-CHILLIWACK R	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
184215	TOMF	0048-SHUSWAP R	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
210135	WA04	0808-KALAMA CR HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
210135	WA04	0808-KALAMA CR HATCHERY	7	West Coast Vancouver Is Sport	21	SWIF BK	SWIFTSURE BANK
210146	WA06	0567-DUNGENESS HATCHERY	7	West Coast Vancouver Is Sport	24	FLOR IS	FLORES ISLAND
210150	WA04	3020-NISQUALLY HATCHERY	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
210150	WA04	3020-NISQUALLY HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
210150	WA04	3020-NISQUALLY HATCHERY	7	West Coast Vancouver Is Sport	23B	BARK SD	BARKLEY SOUND
210150	WA04	3020-NISQUALLY HATCHERY	7	West Coast Vancouver Is Sport	23B	LIGH BK	LIGHTHOUSE BANK
210151	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
210151	WA02	3022-MARBLEMOUNT HATCHERY	8	West Coast Vancouver Is Sport	23B	CP BEAL	CAPE BEALE
210152	WA03	0040-WHITEHORSE POND	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
210154	WA03	0514-BERNIE GOBIN HATCH	6	West Coast Vancouver Is Sport	25	FRIE CV	FRIENDLY COVE
210154	WA03	0514-BERNIE GOBIN HATCH	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
210155	WA03	0514-BERNIE GOBIN HATCH	7	West Coast Vancouver Is Sport	23B	WITT PT	WHITTLESTONE POIN
210184	WA03	0514-BERNIE GOBIN HATCH	8	West Coast Vancouver Is Sport	24	WILF RK	WILF ROCK
212952	WA03	0514-BERNIE GOBIN HATCH	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
212952	WA03	0514-BERNIE GOBIN HATCH	6	West Coast Vancouver Is Sport	23B	KIRB PT	KIRBY POINT
212952	WA03	0514-BERNIE GOBIN HATCH	7	West Coast Vancouver Is Sport	23B	POET NO	POETT NOCK
212956	WA04	3020-NISQUALLY HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
213002	WA02	5172-COUNTY LINE PONDS	6	West Coast Vancouver Is Sport	24	WILF RK	WILF ROCK
213002	WA02	5172-COUNTY LINE PONDS	6	West Coast Vancouver Is Sport	25	MAQU PT	MAQUINNA POINT
213002	WA02	5172-COUNTY LINE PONDS	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
213154	WA04	0806-GROVERS CR HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK

APPENDIX I. CON'T

Tagcode	Hatchery Site ProdArea	Hatchery Site Code-Name	Recovery Month	Catch Region Name	MRP Stat Area Code	Sport Site Code	Sport Site Name
213154	WA04	0806-GROVERS CR HATCHERY	7	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
213154	WA04	0806-GROVERS CR HATCHERY	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
213154	WA04	0806-GROVERS CR HATCHERY	7	West Coast Vancouver Is Sport	23B	DIPL IS	DIPLOCK ISLAND
213157	WA04	0806-GROVERS CR HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
213157	WA04	0806-GROVERS CR HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
213157	WA04	0806-GROVERS CR HATCHERY	9	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
213203	WA03	0040-WHITEHORSE POND	6	West Coast Vancouver Is Sport	23B	AMPH BK	AMPHITRITE BANK
630134	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630153	WA05	0559-GEORGE ADAMS HATCHRY	7	West Coast Vancouver Is Sport	23B	LIGH BK	LIGHTHOUSE BANK
630163	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630223	WA04	0538-PORTAGE BAY HATCHERY	7	West Coast Vancouver Is Sport	27	TWSEVEN	UNKNOWN 27
630245	LOCO	0675-NORTH TOUTLE HATCHRY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630307	WA04	3526-PUYALLUP TRIBAL HATC	6	West Coast Vancouver Is Sport	24	CLEL IS	CLELAND ISLAND
630307	WA04	3526-PUYALLUP TRIBAL HATC	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
630307	WA04	3526-PUYALLUP TRIBAL HATC	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630308	WA04	0532-SOOS CREEK HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630308	WA04	0532-SOOS CREEK HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630311	LOCO	0670-COWLITZ SALMON HATCH	8	West Coast Vancouver Is Sport	23B	BARK SD	BARKLEY SOUND
630312	WA04	0537-VOIGHTS CR HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630312	WA04	0537-VOIGHTS CR HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630313	WA04	0982-ICY CR HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630315	LOCO	0681-LEWIS RIVER HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630335	WA01	1372-GLENWOOD SPRINGS	7	West Coast Vancouver Is Sport	23B	KIRB IS	KIRBY ISLAND
630338	WA05	0559-GEORGE ADAMS HATCHRY	6	West Coast Vancouver Is Sport	24	WILF RK	WILF ROCK
630348	WA05	2807-SUND ROCK NET PENS	7	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
630355	LOCO	0681-LEWIS RIVER HATCHERY	6	West Coast Vancouver Is Sport	24	CLEL IS	CLELAND ISLAND
630409	BRGT	0640-RINGOLD SPRINGS HATC	8	West Coast Vancouver Is Sport	25	TWFIVE	UNKNOWN 25
630410	WA01	0501-SAMISH HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630446	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630451	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630453	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630453	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630453	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630501	LOCO	0680-WASHOUGAL HATCHERY	7	West Coast Vancouver Is Sport	23B	BARK SD	BARKLEY SOUND
630505	WA04	1579-MCALLISTER HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630505	WA04	1578-MCALLISTER HATCHERY	7	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
630505	WA04	1578-MCALLISTER HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630508	WA06	0979-HURD CR HATCHERY	7	West Coast Vancouver Is Sport	25	PIN RK	PIN ROCK
630534	LOCO	0670-COWLITZ SALMON HATCH	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630604	WA01	0989-KENDALL CR HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630606	HEAD	1114-TURTLE ROCK HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630608	WA04	0528-FOX ISLAND NET PENS	7	West Coast Vancouver Is Sport	24	BART IS	BARTLETT ISLAND
630609	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	23B	RAIN BY	RAINY BAY
630609	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	23B	AUST IS	AUSTIN ISLAND
630609	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	23B	G BE RK	
630609	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	23B	PILL PT	PILL POINT
630609	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	25	CATA IS	CATALA ISLAND
630609	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
630609	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	23B	ECOO PT	ECOOLE POINT
630609	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
630609	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	TWFOUR	UNKNOWN 24
630610	HEAD	1599-SIMILKAMEEN HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
630610	HEAD	1599-SIMILKAMEEN HATCHERY	6	West Coast Vancouver Is Sport	24	CLEL IS	CLELAND ISLAND
630610	HEAD	1599-SIMILKAMEEN HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	24	TWFOUR	UNKNOWN 24
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	23B	KIRB PT	KIRBY POINT
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630611	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630611	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630611	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630611	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630611	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	25	NOOT LT	NOOTKA LIGHT
630611	HEAD	2810-WELLS HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT SK	SOUTH BANK
630612	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
630612	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630612	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630612	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630612	HEAD	5462-DRYDEN POND	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630615	WA04	1216-SOUTH SOUND NET PENS	6	West Coast Vancouver Is Sport	23B	RAIN BY	RAINY BAY
630626	WA03	0512-WALLACE R HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK

APPENDIX I. CON'T

Tagcode	Hatchery Site ProdArea	Hatchery Site Code-Name	Recovery Month	Catch Region Name	MRP Stat Area Code	Sport Site Code	Sport Site Name
630632	WA05	0559-GEORGE ADAMS HATCHRY	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
630632	WA05	0559-GEORGE ADAMS HATCHRY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
630632	WA05	0559-GEORGE ADAMS HATCHRY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630638	LOCO	0670-COWLITZ SALMON HATCH	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630745	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	25	NOOT SD	NOOTKA SOUND
630746	WA01	5380-FIDALGO BAY NET PENS	7	West Coast Vancouver Is Sport	23B	CP BEAL	CAPE BEALE
630757	WA02	3022-MARBLEMOUNT HATCHERY	6	West Coast Vancouver Is Sport	25	ESPE IN	ESPERANZA INLET
630760	WA03	4768-LANGLEY NET PENS	7	West Coast Vancouver Is Sport	23B	G BE RK	
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	26	KYUQ SD	KYUQUOT SOUND
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LAPE BK	LA PEROUSE BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
630860	SNAK	0626-LYONS FERRY HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
630860	SNAK	0626-LYONS FERRY HATCHERY	8	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
631009	WA04	0532-SOOS CREEK HATCHERY	7	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631010	LOCO	0675-NORTH TOUTLE HATCHRY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
631010	LOCO	0675-NORTH TOUTLE HATCHRY	6	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631010	LOCO	0675-NORTH TOUTLE HATCHRY	7	West Coast Vancouver Is Sport	23B	DIPL IS	DIPLOCK ISLAND
631010	LOCO	0675-NORTH TOUTLE HATCHRY	7	West Coast Vancouver Is Sport	25	NOOT IS	NOOTKA ISLAND
631010	LOCO	0675-NORTH TOUTLE HATCHRY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631012	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
631013	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631017	WA02	3022-MARBLEMOUNT HATCHERY	7	West Coast Vancouver Is Sport	23B	RAIN BY	RAINY BAY
631020	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631020	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
631020	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
631021	WA01	0501-SAMISH HATCHERY	6	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
631021	WA01	0501-SAMISH HATCHERY	6	West Coast Vancouver Is Sport	23B	G BE RK	
631021	WA01	0501-SAMISH HATCHERY	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	23B	DIPL IS	DIPLOCK ISLAND
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631021	WA01	0501-SAMISH HATCHERY	7	West Coast Vancouver Is Sport	24	PORT PT	PORTLAND POINT
631021	WA01	0501-SAMISH HATCHERY	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631021	WA01	0501-SAMISH HATCHERY	8	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
631026	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
631026	SNAK	0626-LYONS FERRY HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631028	WA01	0989-KENDALL CR HATCHERY	6	West Coast Vancouver Is Sport	23B	AUST IS	AUSTIN ISLAND
631028	WA01	0989-KENDALL CR HATCHERY	8	West Coast Vancouver Is Sport	25	TWFIVE	UNKNOWN 25
631028	WA01	0989-KENDALL CR HATCHERY	6	West Coast Vancouver Is Sport	23B	SAND IS	SANDFORD ISLAND
631028	WA01	0989-KENDALL CR HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
631028	WA01	0989-KENDALL CR HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
631028	WA01	0989-KENDALL CR HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
631031	LOCO	0670-COWLITZ SALMON HATCH	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631032	HEAD	5960-CHELAN PUD HATCHERY	6	West Coast Vancouver Is Sport	23B	BARK SD	BARKLEY SOUND
631032	HEAD	5960-CHELAN PUD HATCHERY	6	West Coast Vancouver Is Sport	25	MAQU PT	MAQUINNA POINT
631032	HEAD	5960-CHELAN PUD HATCHERY	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
631032	HEAD	5960-CHELAN PUD HATCHERY	6	West Coast Vancouver Is Sport	25	NOOT SD	NOOTKA SOUND
631032	HEAD	5960-CHELAN PUD HATCHERY	7	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631038	LOCO	0675-NORTH TOUTLE HATCHRY	8	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
631045	LOCO	0679-KLICKITAT HATCHERY	6	West Coast Vancouver Is Sport	25	MAQU PT	MAQUINNA POINT
631058			8	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
631061	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	25	MAQU PT	MAQUINNA POINT
631061	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	23B	BARK SD	BARKLEY SOUND
631061	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	23B	RAIN BY	RAINY BAY
631061	HEAD	2810-WELLS HATCHERY	6	West Coast Vancouver Is Sport	25	FRIE CV	FRIENDLY COVE
631061	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
631061	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631061	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631061	HEAD	2810-WELLS HATCHERY	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
631148	HEAD	1599-SIMILKAMEEN HATCHERY	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631148	HEAD	1599-SIMILKAMEEN HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631148	HEAD	1599-SIMILKAMEEN HATCHERY	8	Alberni Canal Sport	23A	ALBE IN	ALBERNI INLET
631151	HEAD	5462-DRYDEN POND	7	West Coast Vancouver Is Sport	25	TWFIVE	UNKNOWN 25
631151	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631151	HEAD	5462-DRYDEN POND	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
631212	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	KNGE IS	EDWARD KING ISLAND
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	24	LONG BE	LONG BEACH
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631213	SNAK	0626-LYONS FERRY HATCHERY	7	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
636230	LOCO	0670-COWLITZ SALMON HATCH	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
636345	SNAK	0626-LYONS FERRY HATCHERY	6	West Coast Vancouver Is Sport	23B	G BE RK	

APPENDIX J. CODED WIRE TAGS RECOVERED FROM MARKED COHO HEADS SUBMITTED DURING THE 2001 WCVI CREEL SURVEY.

Tagcode	Hatchery Site ProdArea	Hatchery Site Code-Name	Recovery Month	Catch Region Name	MRP Stat Area Code	Sport Site Code	Sport Site Name
055161	WA05	0562-QUILCENE NFH	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
182119	GSMN	0153-TENDERFOOT CR	6	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
182119	GSMN	0153-TENDERFOOT CR	7	West Coast Vancouver Is Sport	24	KUTC PT	
182120	GSMN	0153-TENDERFOOT CR	7	West Coast Vancouver Is Sport	23B	FLEM IS	FLEMING ISLAND
182726	SWVI	0114-NITINAT R	7	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
182727	SWVI	0114-NITINAT R	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
182727	SWVI	0114-NITINAT R	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
183520	JNST	2293-HOMALCO-TAGGARES	9	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
183523	JNST	2293-HOMALCO-TAGGARES	8	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
183640	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	MACK CR	MACKTUSH CREEK
183640	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	CHIN CR	CHINA CREEK
183640	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
183640	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	ECOO PT	ECOOLE POINT
183640	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	25	FERR PT	FERRER POINT
183640	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	DIPL IS	DIPLOCK ISLAND
183652	LWFR	0150-INCH CR	9	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
183823	SWVI	1901-TOFINO	7	West Coast Vancouver Is Sport	24	VARG IS	VARGAS ISLAND
183824	SWVI	1901-TOFINO	7	West Coast Vancouver Is Sport	24	BRAB CH	
183824	SWVI	1901-TOFINO	6	West Coast Vancouver Is Sport	24	TOFINO	TOFINO
183824	SWVI	1901-TOFINO	8	West Coast Vancouver Is Sport	25	TWFIVE	UNKNOWN 25
183931	GSVI	0295-GOLDSTREAM R	8	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
183935	GSVI	0295-GOLDSTREAM R	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
183935	GSVI	0295-GOLDSTREAM R	9	West Coast Vancouver Is Sport	23B	PILL PT	PILL POINT
184205	GSMN	0112-SEYMOUR R	6	West Coast Vancouver Is Sport	24	TONQ IS	
184222	GSVI	0295-GOLDSTREAM R	6	West Coast Vancouver Is Sport	24	TWFOUR	UNKNOWN 24
184226	GSVI	0100-BIG QUALICUM R	8	West Coast Vancouver Is Sport	27	TWSEVEN	UNKNOWN 27
184228	GSVI	0100-BIG QUALICUM R	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
184325	SWVI	0104-ROBERTSON CR	8	Alberni Canal Sport	23A	MACK CR	MACKTUSH CREEK
184325	SWVI	0104-ROBERTSON CR	8	Alberni Canal Sport	23A	CHIN CR	CHINA CREEK
184325	SWVI	0104-ROBERTSON CR	8	Alberni Canal Sport	23A	FRAN RV	FRANKLIN RIVER
184325	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	MACK CR	MACKTUSH CREEK
184325	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	ALBE CA	ALBERNI CANAL
184325	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	MACK CR	MACKTUSH CREEK
184325	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	COLE CR	COLEMAN CREEK
184325	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	24	TONQ IS	
184325	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	25	CATA IS	CATALA ISLAND
184325	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
184325	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
184325	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	BEG IS	BEG ISLAND
184325	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	PILL PT	PILL POINT
184325	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
184325	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	ECOO PT	ECOOLE POINT
184325	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
184325	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
184326	SWVI	0104-ROBERTSON CR	8	Alberni Canal Sport	23A	NAHM BY	NAHMINT BAY
184326	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	FRAN RV	FRANKLIN RIVER
184326	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	SPRO NA	SPROAT NARROWS
184326	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	CHIN CR	CHINA CREEK
184326	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	CHRI BY	CHRISTIE BAY
184327	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	FRAN RV	FRANKLIN RIVER
184327	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	SPRO NA	SPROAT NARROWS
184327	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	CHIN CR	CHINA CREEK
184327	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	G BE RK	
184327	SWVI	0104-ROBERTSON CR	7	West Coast Vancouver Is Sport	23B	SWAL RK	SWALE ROCK
184327	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
184327	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
184327	SWVI	0104-ROBERTSON CR	8	West Coast Vancouver Is Sport	23B	BAMFIEL	BAMFIELD
184327	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	UCLUELE	UCLUELET
184327	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	PILL PT	PILL POINT
184328	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	SPRO NA	SPROAT NARROWS
184328	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	ALBE IN	ALBERNI INLET
184328	SWVI	0104-ROBERTSON CR	9	Alberni Canal Sport	23A	MACK CR	MACKTUSH CREEK
184328	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	PILL PT	PILL POINT
184328	SWVI	0104-ROBERTSON CR	9	West Coast Vancouver Is Sport	23B	TWTHREE	UNKNOWN 23
184540	SWVI	1901-TOFINO	8	West Coast Vancouver Is Sport	24	BART IS	BARTLETT ISLAND
210159	WA01	0505-LUMMI SEA PONDS	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
210224	WA04	1169-KETA CREEK HATCHERY	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
630912	WA04	5981-WA PROD AREA MPS	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
631130	LOCO	0670-COWLITZ SALMON HATC	8	West Coast Vancouver Is Sport	23B	SOUT BK	SOUTH BANK
631146	LOCO	0670-COWLITZ SALMON HATC	8	West Coast Vancouver Is Sport	21	NITINAT	NITINAT
631215	WAPA	0956-FORKS CREEK HATCHER	8	West Coast Vancouver Is Sport	23B	BIG BK	BIG BANK
631219	WA04	0532-SOOS CREEK HATCHERY	7	West Coast Vancouver Is Sport	23B	CROW IS	CHROW ISLAND
631225	LOCO	0676-KALAMA FALLS HATCHR\	8	West Coast Vancouver Is Sport	27	WINT HA	WINTER HARBOUR